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**NUWARA ELIYA (CEYLON)**

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**ORGANISATION OF MANPOWER**

**with Special Reference to the  
Development of Employment  
Services and Training**

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## PREFACE

"Organisation of manpower, with special reference to the development of employment services and training" constitutes the fifth item on the agenda of the Asian Regional Conference. The Governing Body, at its 109th Session (Geneva, June 1949), decided to place this question on the agenda in view of the importance given to manpower questions, within the framework of the International Labour Organisation's programme and, in particular, the recent development of operational manpower activities in Asia. A brief survey of manpower problems in Asia, of the effect given to the resolution concerning employment service, recruitment and vocational training, adopted by the Asian Regional Conference at New Delhi in 1947, and of the manpower programme for Asia formulated by the International Labour Organisation, has been included in Chapter II, "Trends in Social Policy", of the Report of the Director-General (item 6 on the agenda). The present report is intended to provide the Conference with a basis for considering, in relation to the Asian region, the technical problems in the development of employment services and the organisation of training programmes.

Part I of the report contains a general survey of employment service organisation and problems in Far Eastern countries, and concludes with a proposed resolution presented for the consideration of the Conference.

Part II has been prepared on a different basis, as it contains the reports submitted to the Asian Conference of Experts on Vocational and Technical Training, held in Singapore from 12 to 14 September 1949, and the report and resolution adopted by that Conference. The papers which were submitted to the Singapore Conference are included in this report without change. They comprise a general introduction, followed by four short reports, each of which concludes with a list of points that were submitted as a basis for the discussions of the Singapore Conference. As the Singapore Conference was composed of technical training experts from the region, and in

view of the publication in 1948 of the report entitled *Training Problems in the Far East*<sup>1</sup>, the Office did not consider it necessary to submit to the Singapore Conference a detailed survey of the existing training facilities in the countries of the region. The papers were consequently limited to brief statements of the problems raised by each of the items which had been placed on the agenda of the Conference by the Governing Body. These items were as follows : General organisation and development of technical training ; Material needs and problems of technical organisation ; Recruitment and training of instructors ; and Vocational training of disabled persons.

The report and the resolution adopted by the Singapore Conference, on the basis of its discussion of the various points put forward in the papers submitted by the Office, conclude the present report.

It is suggested that the Conference may wish to discuss first the proposed resolution found in Part I, and then give consideration to the resolution adopted by the Singapore Conference, which is to be found at the end of Part II. The papers submitted to the Singapore Conference and the report adopted would serve to guide the delegates in considering the latter resolution. The Governing Body will wish to know the views of the Conference as to the effect which should be given to the conclusions of the Singapore Conference.

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<sup>1</sup> THIBERT, Marguerite. *Training Problems in the Far East* (Geneva, I.L.O., 1948) (Studies and Reports, New Series, No. 11).

## PART I

# EMPLOYMENT SERVICE ORGANISATION IN THE FAR EAST

### I. INTRODUCTION

Employment service organisation and the development of technical training facilities are two closely related means of approach to Asian manpower problems. Training facilities can be expanded and improved, and as the second part of this report points out, action along these lines is urgent. But trained workers alone cannot solve the manpower question. It is idle to expand training facilities unless employment opportunities are available and unless there is effective machinery for bringing men and jobs together. Manpower policy cannot create employment opportunities—that is the task of general economic development—but it can ensure that the employment market is properly organised in relation to the existing opportunities for useful work. This is the primary task of the public employment service.

A public employment service is indispensable for solving the manpower problems arising out of economic and social development. It necessarily plays a central role in the whole manpower programme. Where there is no effective employment service, a Government has little knowledge of what its manpower problems are, where they are, and how to deal with them. An employer cannot be sure that he is selecting his workers from those best suited to his needs. A worker has no means of knowing where his most favourable employment opportunities lie. And the whole community suffers, directly and indirectly, from the lack of a good employment service, because it has to bear the continuous burden of unsolved manpower problems and of dissatisfaction among employers who cannot find suitable workers and workers who cannot find suitable jobs. In fact, a competent employment service is vital to successful economic development. Effective employment

service work, including the skilful placement of workers in jobs which demand their full capacity, can raise the whole standard of national production and productivity.

The employment service itself is not a panacea for manpower problems, however. It works within the existing economic and social framework, with all that this implies. But in any economic and social circumstances, the service can be an active force in providing the facts and some of the techniques needed to deal with manpower problems intelligently. Thus, in the Far East as well as in other regions, it has been increasingly recognised by Governments, employers and trade unions that the building up of an employment service capable of helping to frame and to carry out manpower policy is an urgent task which merits high priority in national planning for economic and social development.

The employment service of any country is naturally based on principles and methods of operation in harmony with national needs, traditions, and administrative and financial possibilities. Asian countries have their own special needs, traditions and possibilities for development, and thus their own special manpower problems. The traditional economy of almost all of them has been mainly agricultural, with a large proportion of small-scale undertakings and cottage industries. Such communities are not accustomed to make heavy demands upon employment services. Moreover, Asian countries are thickly populated, and, at the present stage of economic development, employment opportunities are scarce in relation to the plentiful supply of manpower; there is, in fact, protracted unemployment and extensive underemployment. This is difficult soil for the employment service to cultivate. Furthermore, certain traditional methods of recruiting workers, *e.g.*, through foremen, family and friends, are deeply rooted in Far Eastern employment market practice. The public employment service, especially in its early stages, tends to be looked upon somewhat suspiciously as an agency threatening to supplant these customs. Special types of recruiting such as the "jobber" and "coolie" systems are still current in almost every country and territory<sup>1</sup> and handicap the growth of public employment services, which have been the less able to combat such practices

<sup>1</sup> For an account of special recruiting systems in Asia, cf. International Labour Organisation, Preparatory Asian Regional Conference: *Labour Policy in General, including the Enforcement of Labour Measures* (New Delhi, 1947), p. 114.

since they lack operational experience and trained staff and have still to win public confidence on a large scale. These difficulties are increased by the fact that in many Asian countries the employment service is regarded as something of a luxury, and has had to fight for the funds and material equipment necessary to enable it to compete successfully with these traditional methods of recruitment.

The generally low levels of literacy and health of the population also affect manpower policy, including recruitment, and thus affect the evolution of the employment service. Finally, in some countries, internal disturbances and civil strife have aggravated conditions of political and economic instability. On the whole, all these various factors have combined to produce an environment somewhat unfavourable to the growth of the public employment service.

Prospects of employment service development are not unpromising, however. Asian Governments, convinced that the State must help to solve the manpower problems connected with economic and social development, realise that an efficient public employment service is an important instrument to this end. The expansion of industrial employment and changes in agricultural techniques are raising new problems of recruiting manpower and opening new horizons for employment service work. Greater attention is being paid to eliminating under-employment and unemployment. More extensive and more varied manpower requirements are growing out of economic progress. The need for better employment information as a basis for manpower policy in agriculture and in industry is more and more acute. Many of the old recruiting systems are being heavily attacked or are breaking down, and the abuses which they generated are being eliminated by means of public control. Employers and workers have become more receptive to the changes in techniques of recruitment required by changing economic and social conditions. Campaigns have been launched to abolish illiteracy, to promote vocational guidance and industrial training and to improve health and welfare conditions. All these factors are gradually creating an environment which is more favourable to employment service progress. This is evidenced by the fact that in the past few years bold strides in employment service organisation have been made in the Far East, despite difficulties which can hardly be appreciated by those unfamiliar with the problems of the region.

One aspect of manpower mobilisation, which in many countries is also a concern of the employment service, is the international movement of workers from areas with a surplus population to areas where an increase of manpower resources is sought. At the present time there is no substantial migration in Asia, either inter-regionally or from outside into a region. But it may be expected that with economic development there may be a resumption of migration for employment or land settlement. Taking into account post-war developments with respect to migration generally, the International Labour Organisation has reconsidered the international standards capable of furthering orderly movement and the practical activities required to put such standards into effect. The International Labour Conference, in July 1949, adopted a revised Migration for Employment Convention and a revised Migration for Employment Recommendation, the latter including a model bilateral migration agreement. These texts contain provisions which specify the role of the employment service in organising migration, in particular with respect to the recruitment and placing of migrants for employment. The experience of the International Labour Organisation may be of value to the Asian countries when they find it opportune to take steps to increase migration as a part of their general manpower programme.

While needs, possibilities and methods of action vary from one country to another, certain general principles of employment service organisation have been found to be widely applicable. These have been worked out on an international tripartite basis and adopted by the International Labour Conference in the form of the Employment Service Convention and Recommendation of 1948. The following sections of this part of the report take these principles as their chief point of departure and seek to relate them to the conditions prevailing in the Far East. The proposed resolution at the end of the report is submitted as a suggested basis of decision.

## II. DEVELOPMENT OF ASIAN EMPLOYMENT SERVICES

The earliest information regarding the establishment of a public employment service in the Far East relates to Japan, where after the First World War four municipal employment

offices were functioning in Tokyo and two in Osaka<sup>1</sup>, and in 1921 the Japanese Employment Exchange Act was promulgated.<sup>2</sup> China, also, took steps to regulate the operation of private employment agencies, and in 1931 the Chinese Employment Agencies Regulations were issued.<sup>3</sup> One year later, an Act was published by the Thai Government—the Employment Agency Act—for the same purpose.<sup>4</sup>

At the same time, both India (including Burma and Pakistan) and Japan showed their interest in employment service organisation by ratifying, in 1921 and 1922 respectively, the Unemployment Convention of 1919, which provides for the setting up of a national system of free public employment agencies.<sup>5</sup> During the discussions on the Convention concerning fee-charging employment agencies at the International Labour Conference in 1932 and 1933, the Governments of China, India, Japan and Thailand expressed the view that improved systems of public employment service were necessary. Employment services were also introduced in some non-metropolitan territories in the Far East, for example, in Indo-China in 1929<sup>6</sup>, and in the Netherland East Indies in 1928.<sup>6</sup> In 1938, Ceylon's first employment office was organised.

In general, however, it was during the Second World War that public employment services began to develop more rapidly in the Far East. During the war, most of these countries felt the need of mobilising their manpower and realised that a public employment service was essential for the purpose. They also began to realise that in time of peace such a service would be equally indispensable if the manpower problems of the transition period and of peacetime economic development were to be solved. Moreover, countries in this area were coming more and

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<sup>1</sup> I.L.O. *Report on Unemployment*. Report II Prepared by the Organising Committee for the First Session of the International Labour Conference, Washington, 1919

<sup>2</sup> I.L.O. *Legislative Series*, 1921—Jap 1-4.

<sup>3</sup> *Idem*, 1931—Chin 2.

<sup>4</sup> *Idem*, 1932—Siam 1.

<sup>5</sup> India (with Burma and Pakistan) denounced the ratification in 1938, owing to the difficulties of implementing the Convention, but Burma remains bound by the Convention which India ratified, although it has ceased to be part of India. (Pakistan and India were still unseparated when the ratification was denounced, but Burma had separated from India in 1937)

<sup>6</sup> Employment exchanges were set up in commercial centres of Saigon and Hanoi, in Indo-China, in 1929; and in Batavia, Bandoeng, Djokjakarta, Soerabaja, etc., in the Netherland East Indies, by a Government Decree, in 1928 Cf *International Labour Review*, Vol LV, No 5, May 1947, pp 382-383.

more to the conclusion that "one of the main duties of a modern State is to see that all its people have work and that none is idle"<sup>1</sup>, and that one important instrument to this end is the provision of a public employment service able to help combat unemployment and underemployment.

Thus, in 1940, the Government of China set up an employment service in its Ministry of Social Affairs, and subsequently enacted various regulations establishing Government employment service offices in several large centres. In 1948-1949 the Government invited an official of the International Labour Office to review the situation and to advise and assist in the improvement of the service. India began to set up the first nine employment offices in 1943-1944 to meet the manpower requirements of wartime industry. In 1945, with the end of the war in sight, the Government continued its efforts to establish an employment service network throughout the country, as a means of facilitating the orderly absorption into civil life of the large number of service personnel and war workers who were about to be released. In Japan, during the war, the employment service was linked to the "labour front" organisations for the purpose of mobilising and controlling manpower for war production; the police also had a hand in the employment service work. In 1946, however, the service was converted into an organisation for peacetime recruiting, and it has been established on a new statutory basis, and since then has been constantly developing under the guidance and direction of the Labour Division of the S.C.A.P. After the war, other Asian countries and territories, such as Burma, Fiji, the Philippines, the Malayan Federation and Singapore, started to establish and develop public employment service facilities within their respective boundaries.

The development of public employment services in Asian countries is also closely related to the efforts made to eliminate abuses connected with many of the special recruiting techniques prevalent in these countries. It has been the practice for considerable numbers of employers to recruit workers indirectly through agencies such as jobbers, recruiting contractors, Cais, kanganis. In such cases the workers often did not clearly understand the conditions of employment, and incurred personal

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<sup>1</sup> Jawaharlal NEHRU in *Employment News*, anniversary number, July 1948, issued by the Director-General of Resettlement and Employment, Ministry of Labour, India, p. 11



obligations to the recruiter. But these systems of engaging workers through intermediaries of one kind or another, while increasingly condemned in theory and practice, could not be suppressed in the absence of public machinery for recruiting capable of replacing them effectively and meeting the needs of the different industries (*e.g.*, mines and plantations). Thus, concern with remedying the abuses caused by these systems of recruiting gave new impetus to employment market organisation through the public employment service and to the consequent extension of public employment facilities. This was the case in Japan, for example, where intermediaries are now outlawed, and the enforcement of the provisions prohibiting their operations is entrusted to the public employment service.

As a result of all these various influences, there are now at least a dozen countries and territories in the Far East with employment services in operation.

The Asian Regional Conference held in New Delhi in October-November 1947 recommended that public employment services should be developed in Asian countries. The Far Eastern countries have also displayed a keen interest in the Employment Service Convention and Recommendation adopted by the International Labour Conference in 1948. The present need to find a solution for manpower problems of vast dimensions is encouraging, to an increasing extent, the development of improved employment service facilities in Asian countries.

### III. LAWS AND REGULATIONS

In Asian countries, employment services are established either by legislation or statutory regulations or by administrative measures. Except in Japan, where the new Employment Security Act and Regulations came into force in 1947, to replace the Employment Exchange Act, 1921-1936, little comprehensive legislation appears to be in force today. In China the Employment Exchanges Act of 1935, which prescribes the inauguration of employment services by the Central Government, is considered out of date, and its revision is under consideration. India, though it has an active employment service, has not so far promulgated any laws or regulations on the subject, and neither has Burma, although it is reported that in both countries Bills relating to the employment service are under consideration. Many employment services in non-metropolitan territories are established simply by administrative action.

It is sometimes better for legislation to lag behind practical developments than to be too far in advance of them, particularly since there is a tendency in some countries to adopt far-reaching legislation which cannot be properly applied at the existing stage of economic and administrative development. On the other hand, it is also desirable that an employment service should have some form of statutory basis, defining its essential object and tasks, and its basic administrative structure. Moreover, some form of legislation or regulations would be necessary in giving effect nationally to the provisions of the Employment Service Convention and Recommendation of 1948.

The tasks and the structure of an employment service are, however, in fact determined by its own evolution. Experience suggests that while it is a mistake for the laws and regulations establishing the service to define its functions too narrowly, it is equally inadvisable to over-burden the service in its early stages by placing too many duties on it before it has had a chance to gain experience and strength. The solution seems to lie rather in a broad definition of function in law and regulation, to allow for future expansion of the work, but with an initial administrative concentration on the most important tasks to be performed.

#### IV. TASKS OF THE EMPLOYMENT SERVICE

The basic functions of the employment service—those relating to the collection of information and the placing of workers in employment—tend on the whole to be similar in the different countries. However, the service is called upon to perform a variety of additional duties which vary considerably from one country to another in accordance with the specific manpower needs to be met.

##### *Employment Information*

The basis of manpower policy is facts—facts about employment and unemployment, about occupations and industries, about job vacancies and about the workers in employment or looking for work. The employment service has to supply many of these facts. One of its primary tasks is to collect and analyse as much accurate and up-to-date information as possible about the situation and trend of employment and the requirements of the different occupations and industries. This information

is essential not only for placement, but also to enable the employment service to fill the advisory role required of it—e.g., in connection with development planning, organising training and retraining, and resettling refugees. In seeking the facts, the employment service naturally works in close co-operation with employers and trade unions, in whose possession lie many of the raw materials of employment market information.

In Asian countries, the importance of this particular function of the employment service needs no emphasis. In these countries, many employment services have stressed the need to collect information concerning employment and unemployment, and the persistent lack of adequate information in this connection is regretted by Governments, employers and trade unions alike.

The Governments of Burma, Ceylon, China, India, Japan and Pakistan are devoting special attention to the assembly of all kinds of employment market information, and are developing the facilities of the employment service in order to equip it to do this work better. From the standpoint of statistical techniques and methods of occupational and employment market research, however, most of this work is still in its very early stages. But it is being pressed forward as an essential basis for the other work of the employment services.

Collecting and analysing employment information is not enough, of course. The facts have to be made available promptly and presented in such a way that they can be readily used by the different Government agencies concerned, by employers and their organisations, and by the trade unions. The test of employment service work in the information field is the extent to which the data are used for practical purposes and do in fact constitute the basis of national and local manpower policy. Often, even where the facts are available, they are not widely enough used by all those concerned. This is a feature of the work which should be particularly carefully watched in Asian countries, and it can only be developed by close co-operation between the Government and the employers and trade unions.

### *Placement Work*

A second specific task of any employment service is to help workers to find suitable employment and employers to

find suitable workers. The action taken by the employment service for this purpose makes up its basic work of placement. This work is the core of the service's technical activities. Most of its other tasks are built up in direct relation to its placement functions.

The first steps are concerned with the job seekers. Officers of the service register persons looking for work ; find out, evaluate and record their occupational qualifications, experience and wishes ; classify the applicants systematically in an occupational group ; and place their names on file for referral to suitable employment opportunities or help them to find such employment counselling, training, or other related services as they may need. The registration and interview of applicants for employment is highly skilled work, which leaves little room for improvised and hurried methods. On the technical side, more and more ways are being found of taking careful stock of the vocational capacities of job seekers and relating these capacities to the requirements of the different occupations and jobs. All this cumulative knowledge is indispensable for efficient placement work. But there is another side of the work which is just as important as the technical side. The employment service is dealing with human beings, and with human beings who are taking an all-important step in their lives—finding a job on which much of their happiness, security and progress will depend. The service must have a warm and human approach as well as mere technical efficiency. The one without the other is not enough. This may sound obvious, but even the most highly developed employment services are still far from achieving a standard of placement work which is satisfactory from the human as well as the technical standpoint. For this reason, workers are sometimes loth to entrust their vocational future to a service which they feel is too busy to care what happens to them as individuals.

The other side of the placement work of the employment service is to help employers to find suitable workers. This means obtaining from employers precise information on the vacancies which they notify to the service and on the technical and other qualifications they demand from the workers they are seeking. Each employment office has to study the occupation and job requirements of the undertakings in its area so as to be able to send, on request, the right kind of worker. It has to organise contacts with employers systematically and

not leave these contacts to chance. In fact, it has to develop the kind of relations with employers which will influence them in favour of employing workers recommended by the employment service simply because other workers sent them by the service and engaged by them have made good. This means a high degree of technical efficiency in analysing job requirements and assessing the employers' needs; administrative efficiency in organising contacts with employers and recording information; and good personal relations, with an ability to give personal and not purely mechanical service to employers.

Finally, the procedure for registering and interviewing job seekers and for noting employers' labour requirements are matched together in the best interests of the employers and workers concerned. This process of referral to employment is a delicate part of the whole placement mechanism, and can only be successful where the technical organisation of each of the preceding stages is sound and where the principles of policy are clear. In particular, it is of special importance that the workers whose names are submitted to employers should be selected on the basis of suitability for the job.

The extent and character of the placement work of any employment service are a significant index of the real value of the service in the economy of the country, and they also reflect the main characteristics of the manpower situation in the different countries. In the Far East, registrations of applicants, vacancies notified and placements are increasing in various employment services. In India, for example, the number of registered applicants in June 1946 was 114,766 and the number of placements was 5,382; but two years later, *i.e.*, in June 1948, the corresponding figures were 219,714 and 25,399 respectively. In China, the Government employment offices registered about 18 per cent. more applicants and 40 per cent. more vacancies and made 44 per cent. more placements in 1947 as compared with 1946. In Japan, in mid-1949, about 150,000 workers were being placed in employment each month by the public employment service; vacancies notified, applications for employment and placements effected are all increasing.

One general tendency may be observed in placement work in the Far East. More clerical and unskilled workers than skilled and specialist workers are job seekers, and vacancies notified and filled are also largely in the unskilled and "white collar" or "long-gowned" categories. During 1947, for example,

in China's eight Government employment offices, out of the total of 11,505 vacancies, the greatest demand was for domestic servants, the vacancies for them numbering 2,324; openings for skilled workers only amounted to 537. The figures of placements were in the same order: domestic servants, 2,121; teachers, 1,333; shop assistants and commercial apprentices, 1,309; secretarial and clerical personnel, 691; and skilled workers, 380. In India, there is a shortage of skilled personnel and an abundance of clerical staff and unskilled workers—peons, *chowkidars*, *khalasis* and *munshis*—registered for jobs. The situation in other countries and territories is much the same.<sup>1</sup> It indicates a rather tenuous link between the employment services, on the one hand, and industry and agriculture, on the other.

Two further points may be noted. In the first place, in many Far Eastern countries the applicants registered for employment far outnumber the vacancies notified and still further exceed the placements made. In China, for example in 1947, 53,225 applicants were registered, 11,505 vacancies were notified and 7,763 placements were made through the Government employment offices. Thus, the lack of employment opportunities is a distinctly limiting factor on much of the placement work. On the other hand, as in India and Pakistan, certain types of vacancies cannot be filled, because of the fact that the occupational qualifications of the applicants do not match the requirements of the vacancies—in most cases because those looking for work lack technical skill or industrial experience. In India, for example during 1947-1948, there was an average of 55,000 to 97,000 vacancies outstanding in every month, with 200,000 to 300,000 applicants on the live registers, while each month the placements represented about 30 to 40 per cent. of the new registrations.

As in every other country and region, the employment service has to fix its policy in regard to placing workers in employment. Experience in Asia as well as elsewhere indicates that

<sup>1</sup> For example, in Ceylon, out of 64,974 applicants registered in September 1948, more than 80 per cent were semi-skilled, unskilled and clerical workers, and the overwhelming majority placed during the first nine months of 1948 were persons belonging to these categories. In Fiji, where a shortage of labour was felt in 1947, statistics show that the applicants registered and vacancies notified and filled were mainly unskilled labourers and domestic servants. Cf., for Ceylon, *Twenty-five Years of Labour Progress in Ceylon* (Colombo, 1948), p 21, and for Fiji, *Annual Report of the Commissioner of Labour*, 1947, Council Paper No 27, p 9

it is important for the employment service, in referring workers to jobs, to observe strict neutrality. This attitude of neutrality should prevail, *e.g.*, in respect of employment available in an establishment where there is a labour dispute affecting such employment. Moreover, the employment service should refrain from referring workers to employment in respect of which the wages and working conditions fall below the standard set by laws or regulations or (if this is administratively feasible) by prevailing practice. These general policies of referral are included in the Employment Service Recommendation, 1948. Moreover, the Employment Service Convention provides that the general policy of the employment service in regard to the referral of workers to employment shall be formulated after consultation with representatives of employers' and workers' organisations. Since the acceptance of these principles tends to inspire the confidence of employers and workers alike, their application, as appropriate in the circumstances, is an important element in securing wide use of the facilities offered by the employment service and the full co-operation of employers and workers and their organisations.

### *Specialisation of Placement Work.*

The placement work of the employment service is usually organised on an occupational and industrial basis in order to meet the needs of the employers and workers who make use of its facilities. The extent to which the work is specialised on this basis varies with the size and character of the field served by the different employment offices and with the special needs of the economy. In the Far East, for example, it is generally considered that specialisation of placement work by the various branches of economic activity is essential as a means of adapting employment service activities to practical needs and accelerating the abolition of the jobbing system and other comparable recruiting systems. In working out suitable forms of specialisation, it is often useful to convene periodical meetings of the representatives of the different branches of economic activity concerned (*e.g.*, mines, plantations, textiles, construction, transport).

In addition, a number of Asian employment services have initiated special arrangements for women, young persons, disabled persons, technical and professional workers and ex-service personnel. These arrangements are not organised on

an occupational or industrial basis, but cover workers who because of some special characteristic or tradition are, or appear to be, set apart in some way from the main stream of applicants or require a certain amount of specialised service.

Article 7 of the Employment Service Convention provides that—

Measures shall be taken . . . to facilitate within the various employment offices specialisation by occupations and by industries, such as agriculture . . . and to meet adequately the needs of particular categories of applicants for employment, such as disabled persons.

The Employment Service Recommendation states this provision in more detail. As noted below, the Convention also provides for special arrangements for juveniles.

### *Placement of Young Persons.*

The placement of young workers in suitable employment is a task of unvarying importance in any country. Whether there are enough jobs to go round or not, assistance to new entrants into the employment market is a vital part of economic organisation and social policy. This is recognised in the Far East, and measures relating to youth employment include emphasis on youth guidance and placement.

Nevertheless, for many obvious reasons, little appears to have been done so far to organise the placement of young persons on the scale required by the circumstances in Asian countries. The only available figures are for China where, during 1946, out of the total of 45,118 applicants registered with the Government employment offices, 4,634 were young persons under nineteen years of age. Many employment services in the Far East, including those of China, India and Japan, are paying particular attention to youth placement and the development of vocational guidance services linked with the placement of young persons in useful employment.<sup>1</sup>

<sup>1</sup> Vocational guidance for young persons and to some extent for adults is being emphasised in relation to recruitment and placement work in the Far East. The Government of India, for example, formerly had a Resettlement Advice Service for the benefit of demobilised service personnel, where some 725,000 ex-service men and women were given advice. In China, a vocational guidance section is included in every public employment office, which also gives employment counselling to adult applicants. In Japan, the public employment service is required to provide vocational guidance and employment counselling, especially for persons physically handicapped and those entering employment for the first time. Somewhat similar arrangements are also being developed in certain other Asian countries and territories. Lack of trained personnel and of adequate funds for experiment and development are important limiting factors.



The Employment Service Convention attaches special importance to arrangements for the placement of young persons in employment. Article 8 provides that "special arrangements for juveniles shall be initiated and developed within the framework of the employment and vocational guidance services". Naturally, these arrangements are of great significance in Asian countries, all of which are seeking to link the education, guidance and training of young persons to their satisfactory placement in suitable employment. The Vocational Guidance Recommendation of 1949 contains fairly detailed provisions concerning the development of vocational guidance services for young persons. These standards may be useful in developing Asian arrangements for helping young persons to find suitable employment.

### *Co-operation in Training Schemes*

The employment service has a direct concern with the scope, content and organisation of training schemes. One of its basic tasks, as indicated in the Employment Service Convention, is "to facilitate occupational mobility with a view to adjusting the supply of labour to employment opportunities in the various occupations". The primary means of doing this is through training and retraining services. It follows that the employment service has considerable responsibility in the training field. It may, for example, assist the competent authorities in establishing and developing the programmes of training and retraining, fixing their content, and selecting persons for these courses. It would also, in co-operation with the training authorities and employers' and workers' organisations concerned, place in employment persons who have completed their training.

These tasks are particularly important in the Far East. The lack of skill among applicants for employment has led many employment services in this region to promote training and other facilities to assist persons in occupational transference. In China, a number of Government employment offices provide guidance for the purpose; many have also organised short-term vocational training classes in trades with good employment prospects for persons wishing to improve their skills or change their occupations. In countries where the employment service and vocational training are closely connected in administration, as for example in India and Japan, persons

needing training for occupational transference are generally referred to training by the employment service so as to ensure co-ordination in their future placement.

### *Employment Service in Relation to Agricultural Development*

In the Asian countries, the employment service is faced with the special problem of adapting its work to the needs of agricultural communities.<sup>1</sup> In particular, it will necessarily be called upon to assist in recruiting workers for plantations and other large-scale agricultural undertakings. This requires special techniques of action and organisation and specially trained staff. It adds to the need for a nation-wide service, organised with a national outlook and extending its facilities throughout the country. The development of effective public placement services for large-scale agricultural undertakings will also help to overcome many of the abuses associated with the private recruiting systems which have hitherto held the field.

As industrial employment expands, moreover, the employment service has new responsibilities in agricultural areas. Its fact-finding and general placement services help it to be a key agency in facilitating manpower redistribution between urban and rural areas so as to safeguard the needs of agriculture and rural crafts while eliminating underemployment in rural areas and meeting the labour requirements of industrial development. In this way, many of the economic and social problems connected with a wholly unregulated flow of manpower towards developing areas may be avoided, or their impact substantially reduced.

Many of these questions are special to the Asian countries, and it must be admitted that world experience offers few clues to their solution. The action which might be taken to adapt employment services to the needs of large-scale agriculture—of its employers and its workers—and of the agricultural population generally might therefore be usefully examined by this Conference, with a view to helping the employment services to become an integral part of Asian national economies.

### *Responsibilities in Connection with Unemployment*

The employment service cannot itself create employment opportunities directly, but it has important responsibilities in

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<sup>1</sup> The characteristics of the agricultural labour market of Asian countries are brought out in Report IV, *Agricultural Wages and Incomes of Primary Producers*.

connection with unemployment. Its research activities can explore the causes of unemployment. Its information can indicate the extent and character of the problem. Its placement work and relationship to the training programme can help unemployed persons to find their feet in the employment market. Where a scheme of unemployment insurance or relief is in force, the employment service must co-operate in or be responsible for the development and administration of the scheme.

The employment service can also exercise great influence on economic and social planning calculated to produce a more favourable employment situation. One of its important tasks is to co-operate with other public and private bodies concerned with manpower problems arising out of the economic situation or other factors. This work goes beyond placement work in a technical sense and is linked closely to many important parts of economic and social planning. The service can assist in the planning of the location of economic activity in relation to labour supply, in developing housing projects and public works, in fixing priorities for industrial development, in relating agricultural policy to manpower policy, and so forth. Its relation to this work is twofold. First, by giving advice on all manpower aspects of the situation, the service can contribute to the formulation of sound policy in these broader fields. Secondly, by being fully informed of the agreed action in these fields, the service can carry on its own activities more logically as a co-ordinate part of national economic and social policy.

Many Asian countries have recognised the importance of securing formal co-operation between the employment service and other agencies whose work affects the employment situation, notably the authorities responsible for carrying out public works. In India, for example, an assistant director of the employment service was assigned the duty of encouraging public works projects capable of absorbing the large number of displaced persons registered with the employment service as a result of the partition.

#### *Other Tasks*

Within the limits of practical possibilities, the employment service gradually takes on other functions. For one thing, it is usually called upon to help workers to move from one area to another where this is necessary for the purpose of finding

employment or removing underemployment. It provides information and advice about employment prospects in other areas, and often pays (or authorises the payment of) some or all of the travelling expenses of workers transferred either by it or with its approval. The service may be an important agency in resettling refugees in employment. This is a major task where this question is posed on a large scale, as at present in certain Asian countries.

Fully aware of the special importance of redistribution of manpower to assist economic development and higher living standards, Burma, Ceylon, India, Japan and Pakistan have taken action designed to help workers to move from one area to another. The Burmese employment office endeavours to assist employers and workers both in its particular area and in other areas with a view to promoting mobility of labour. In Ceylon, free transport is provided for persons sent by the employment service to employment at some distance from their homes. During the partition, the Indian and Pakistani employment services helped very large numbers of refugees to find employment in various areas and to settle in their new homes.<sup>1</sup> The Japanese employment service regulations also provide that action to increase the mobility of labour shall be taken when and where necessary.

Finally, in some Asian countries and territories the employment services have taken on a number of welfare activities for the benefit of those seeking work. The Chinese employment service, for example, sometimes provides medical and legal advice for applicants, and helps to organise job seekers into associations for their mutual help and protection, and conducts follow-up to ensure that those placed in employment are happy in their work. These activities are somewhat novel in employment service development, and it may be that they have a very useful role to play in Asian countries. Apart from the help to unemployed persons so promoted, the expansion of such activities may lead to the employment service becoming a place where people bring their employment problems and receive practical help in dealing with them.

These are only a few of the tasks of a national public employment service. Each one must be carried out efficiently

<sup>1</sup> In India, up to the middle of March 1948, 21,933 refugees had secured employment through the employment service and the Government Transfer Bureau, and in Pakistan, by the middle of January 1949, 48,288 refugees had been placed by the employment service.

if the service is to play a useful part in the economy. It is for each nation to decide which tasks are the most important in its own circumstances and which are less important, and to set the pace at which the employment service can safely expand its duties and the services which it renders to the economy as a whole and to individual employers and workers.

#### V. USE OF EMPLOYMENT SERVICE FACILITIES

One of the problems of employment services in the Far East arises out of the fact that employers and workers are not accustomed to use public employment facilities. Since the employment service is still new to many Asian countries, it has to do a great deal of publicity and canvassing work in order to obtain greater co-operation from employers and to convince workers of the usefulness of the facilities. In most countries, the employment services have undertaken such work, but all of them recognise that far greater efforts will have to be made to intensify and improve it, in particular with a view to bringing the employment service into expanding industrial life as effectively as possible. Action along these lines has been stressed in China, India, Japan and Pakistan, for example.

The Employment Service Convention emphasises the need for special measures "to encourage full use of employment service facilities by employers and workers on a voluntary basis". The related Recommendation makes certain suggestions which might usefully be followed up in Asian countries. It urges that efforts to encourage the full voluntary use of the information and other facilities of the employment service should include "the use of films, radio and all other means of public information and relations"; that workers applying for unemployment assistance and so far as possible workers taking Government-sponsored courses of training should be required to register for employment with the service; that juveniles and others entering employment for the first time should be specially encouraged to register with the service and attend for interview; and that "employers, including the management of public or semi-public undertakings, should be encouraged to notify the service of vacancies for employment".

Clearly, in encouraging full use of employment service facilities, Government agencies can set a good example by recruiting through the service or through related civil service machinery the workers they need. The employers' organisations

and trade unions can also do a great deal to make better known and appreciated the basic work of the employment service in manpower organisation and the advantages accruing to the workers, the employers and the nation from the fullest use of the service's facilities.

In final analysis, however, the prime factor determining the use made of the employment service will be the efficiency of the service itself.

## VI. ADMINISTRATIVE ORGANISATION

The organisation of each national employment service must fit into the general framework of the national administration and the service is related to the stage and the character of economic and social development in each country. Several Asian countries are intensifying their efforts to organise an effective administrative machine in line with the standards set by international regulations.

The Employment Service Convention lays down only three basic principles which were considered generally applicable. The first of these is that the employment service should consist of "a national system of employment offices under the direction of a national authority". The second is that the system should comprise "a network of local and, where appropriate, regional offices, sufficient in number to serve each geographical area of the country and conveniently located for employers and workers". The third relates to the recruitment and training of employment service staff.

The acceptance of the first principle is important in Federal as well as in other countries, even where the service starts with a limited network of only a few employment offices in the main centres of the population. A national system of organisation provides a basis for growth which would be lacking if the offices were set up one by one and each left to operate as a separate unit. Moreover, a national system tends to facilitate the necessary mobility of labour and the placing of workers in the jobs which are best suited to their capacities, wherever they may be located. It is also the only effective means of countering the abuses associated with certain special systems of recruiting prevalent in the Far East, including the jobbing system.

The organisation of the employment service on a national basis does not preclude the grant of a large degree of autonomy

to regional, State or provincial units of the service, or the exercise by such units of powers granted them under the Constitution. On the contrary, most large countries, and all Federal countries, have found considerable decentralisation to this level to be highly desirable, so that the work of the service may be well adapted to the employment needs of its area of operation.

Nevertheless, where there is a national system and national supervision of employment service operations, all the regional units work as integral parts of one nation-wide service, and in close co-operation with the national authorities. The latter are then able to ensure an even development of employment service facilities (meeting the needs of agricultural as well as industrial States or provinces), to secure the necessary co-ordination of policy and administrative practice, to encourage the adoption of basic standards of technical and administrative operation, and to deal with the many manpower problems which overlap from one region or community to another or are clearly national in scope. Moreover, the financing of the employment service is easier and the costs more justly distributed where the service is organised as a national system.

The Employment Service Recommendation, recognising the importance of unified and co-ordinated national administration, states that, for this purpose, provision should be made for—

- (a) the issue by the (central) headquarters of national administrative instructions ;
- (b) the formulation of minimum national standards concerning the staffing and material arrangements of the employment offices ;
- (c) adequate financing of the service by the Government ;
- (d) periodical reports from lower to higher administrative levels ;
- (e) national inspection of regional and local offices ; and
- (f) periodical conferences among central, regional and local officers, including inspection staff.

The second organisational principle stated in the Employment Service Convention, that of having within the national system a sufficient number of conveniently located employment offices, needs little emphasis. It is important for practical operating reasons. If the network is to operate effectively and to be widely used, it must have enough offices to serve the employers and workers of the different areas of the country and ensure that these offices are so located that they are easily accessible to employers and workers alike. In fact, each local office of the service has to be located and organised in the interests of those

who use—or are being encouraged to use—its facilities. Attention to these matters can make a great deal of difference to the reputation of the employment service in the local community.

The maintenance of an adequate and conveniently located network of employment offices, as required by Article 3 of the Employment Service Convention, poses special problems for Far Eastern countries. It is difficult to have a sufficient number of local offices in large and thickly populated countries, and in countries where there is a great disproportion between provinces or areas in regard to the density of the population (in Pakistan, for example, ranging from 9 per square mile in one province to 789 per square mile in another). It is difficult to plan the even development of local offices and their location so that both employers and workers will find them equally convenient. It is difficult to organise effective service in overcrowded areas, on the one hand, and in sparsely populated areas, on the other. These problems can all be overcome, however, provided there is agreement on the importance of extending employment service facilities as widely as possible, with due regard for the convenience of employers and work seekers, and provided adequate funds are available.

### *Recruitment and Training of Staff*

The Employment Service Convention includes a special Article (Article 9) on the recruitment and training of employment service staff. The Conference realised that the staff of the service hold the reputation of the whole service in their hands, and that their competence is the greatest single factor ensuring an efficient and appreciated employment service. The Convention provides that “the staff of the service shall be composed of public officials whose status and conditions of service are such that they are independent of changes of Government and of improper external influences and, subject to the needs of the service, are assured of stability of employment”. It also states that the staff “shall be recruited with sole regard to their qualifications for the performance of their duties” and “shall be adequately trained for the performance of their duties”.

In Asian countries, the problems of recruiting and training competent employment service staff are especially acute. The services are in their early stages, and their needs are great. The field of recruitment is not wide, and few fully trained and



experienced administrators and technicians are available to provide in-service training for those appointed.

Several staff training classes have been opened to overcome this obstacle to employment service development, for example, in China and India <sup>1</sup>, and these classes have contributed to the initiation of a number of public employment service establishments in other countries also.<sup>2</sup> Nevertheless, in view of the size of staff required, a considerable increase of staff training facilities is needed. Further, the training is too often confined to initial training ; as in many other parts of the world, there is little done to keep professional skills up to a minimum level and up to date by means of systematic on-the-job training and refresher courses, and to improve them through courses whereby the staff may acquire improved techniques and wider knowledge of the industries and occupations in the areas which they serve. In this whole field, there would seem to be considerable scope for regional and international co-operation.

## VII. CO-OPERATION WITH EMPLOYERS AND WORKERS

Too much emphasis cannot be placed on the need for the employment service to carry on its work in the closest co-operation with the freely chosen representatives of employers and workers. The employment service needs this co-operation in order to do any part of its work. It must have its roots within the community which it serves ; otherwise its activities are bound to be superficial and impractical. Most countries have found it necessary and desirable to establish formal advisory committees to the employment service, to ensure, at the national and local levels alike, that the service both enlists and makes use of the co-operation of employers and workers and their organisations. These committees give the service a direct and practical link with the special economic activities of the country or area or with the problems of special groups in the employment market (*e.g.*, young persons).

<sup>1</sup> The Chinese Government several times opened training classes for employment service personnel in the Central Training Corps during the war, as a first step towards starting the service. In India also, in order to overcome the difficulty in providing staff to man the employment service in the early stages, the Government established a staff training centre where, under the guidance of officers of the British Ministry of Labour and National Service, the training of employment service staff was undertaken.

<sup>2</sup> In Burma and Ceylon, for example, the opening of employment offices was facilitated by the return of the Government candidates who had completed a course of training in the employment service in India.

The principle of employer-worker co-operation with the employment service is emphasised in the Employment Service Convention. Article 4 states :

1 Suitable arrangements shall be made through advisory committees for the co-operation of representatives of employers and workers in the organisation and operation of the employment service and in the development of employment service policy.

2. These arrangements shall provide for one or more national committees and where necessary for regional and local committees.

3 The representatives of employers and workers on these committees shall be appointed in equal numbers after consultation with representative organisations of employers and workers, where such organisations exist.

In addition to general advisory committees at the different operating levels, special arrangements for employer-worker co-operation are often useful for planning action to meet the employment problems of particular industries or groups of industries or particular categories of workers. This may well prove to be the case in most of the Asian countries.

For the purpose of ensuring close co-operation between representatives of employers and workers in the employment service, advisory committees have been organised in some Asian countries, notably in India and Japan. In India, employment advisory committees have been set up at the national, regional and sub-regional levels. The National Employment Advisory Committee is an active organisation under the chairmanship of the Director-General of Resettlement and Employment. In Japan, advisory committees are appointed on a national, prefectural and employment market area basis, and are composed of representatives of employers, workers and the public (at least one of whom must be a woman) in equal numbers. In China and some other countries, however, the organisation of advisory committees still remains, for a number of reasons, in the planning stage.

#### VIII. REGULATION OF FEE-CHARGING EMPLOYMENT AGENCIES

The public employment service naturally competes with various private employment agencies. Private agencies are still influential in the Far East, and the Governments concerned are taking measures to regulate, rather than to abolish, such agencies, so as to eliminate abuses arising out of the operations of fee-charging agencies and to promote co-ordinated public and

private effort in the employment market. At present, in most Asian countries, the activities of fee-charging agencies are subject to public supervision and control, though it has not always been possible to enforce these measures so as to obviate all abuse.

The Fee-Charging Employment Agencies Convention was revised at the 1949 Session of the International Labour Conference, with a view to making its provisions more flexible and more widely ratifiable. The Convention now provides (a) for the progressive abolition of fee-charging employment agencies conducted with a view to profit and the regulation of other fee-charging agencies or (b) for the regulation of all fee-charging agencies, including those conducted with a view to profit. The ratification of this Convention by Asian countries would help to correct abuses which have persisted for many years and would also help to promote a more rational organisation of the employment market. The present Conference might therefore wish to consider the possibilities of early ratification of this Convention by the Governments concerned, and to hear the views of employers' and workers' representatives on this matter.

Moreover, the Employment Service Convention of 1948 provides, in Article 11, that "the competent authorities shall take the necessary measures to secure effective co-operation between the public employment service and private agencies not conducted with a view to profit". Such co-operation is very important in many Asian countries. The employment service needs their co-operation. Its aim, as a rule, is to supplement such forms of recruitment, in particular by providing the co-ordinated machinery needed to enable individual employers and workers to draw upon as wide an employment market as is needed to meet their requirements.

## IX. DIFFICULTIES AND PROBLEMS

Despite the growth of employment services in the Far East in recent years, there are special difficulties and problems confronting them which hamper their development, and which, because of their fundamental nature, justify special notice. These may be summarised briefly as follows :

(1) A number of Asian countries and territories are still suffering today from an unstable domestic situation, thus lessening the possibilities of further progress of employment services

which are only in their infancy. In such circumstances, it is impossible for the Government to support the service with adequate funds or to carry out effective supervision. Where there is also a breakdown of the ordinary machinery for carrying on trade and industry, the opportunities for effective placement are greatly reduced.

(2) In most of the countries under review, lack of employment opportunities, especially of industrial employment, also restricts the development of the employment services. The traditional small-scale industrial undertakings do not absorb very many workers. Agriculture is a difficult field for a young employment service to operate in effectively, and there is little large-scale agriculture (other than the plantations) in the Far East. The general lack of sufficient employment opportunity, combined with the character of the agricultural and rural economy, is a serious obstacle to employment service development. As a consequence, achievements are limited, and, except in a few large cities, even the registration of applicants and vacancies cannot be expected to rise much higher without further economic development in these areas.

(3) Moreover, even in the existing industrial structure, well-entrenched systems of recruiting workers exist which are traditional in the Far East and which it will take many years of sustained effort to overcome. Many of these systems are regarded as an unmitigated evil, but they can only be overcome effectively by the presence of good public employment service facilities. The growth of the service is, however, impeded by the prevalence of these very types of recruiting, which have for many years characterised Far Eastern employment market organisation.

(4) The lack of balance between manpower supply and demand constitutes another difficulty which discourages the employment service in many cases. In China, India and Pakistan, for example, the supply of clerical staff and unskilled workers often outnumbers skilled labour, and, as a result, the placements effected are largely for unskilled and domestic workers, who are generally less directly connected with the economic development of the country. At the same time, certain vacancies, both professional and industrial, are never filled because of the lack of applicants with the required qualifications. This problem emphasises the direct relation of vocational training and employment service organisation, and it will be solved in part by the

further development of training facilities and the co-operation of the employment services with their operation.

(5) The employment services of most Asian countries lack technical operating experience, thus making every aspect of the technical organisation of their work more difficult and complicated. This is obviously due to the shortness of their history and also in some cases to the foreign conception of the work, which is alien to the traditional cultural patterns of the country. The lack of technical experience is accompanied by an equally serious lack of administrative experience in the employment service field.

(6) Most Far Eastern countries also lack trained employment service staff. Headquarters personnel capable of providing systematic staff training, by central, regional or local courses, are rare or non-existent throughout the Far East. In some of these countries, moreover, the conditions of employment of service staff are not calculated to attract suitable personnel and to encourage them to make their career in the service.

(7) In a number of Asian countries, employment service literature and other technical materials are generally inadequate, both in quality and scope, thus preventing the staff from knowing what progress is being made elsewhere in the employment service and from adapting such material to their own needs with a view to increasing their working efficiency. This is due partly to limitation of supplies, and partly to the inability of the Governments to defray the necessary cost. In some cases the language difference in the material supplied also constitutes a barrier to countries seeking outside information, since the employment services concerned have no satisfactory arrangements for reading and translating materials in foreign languages.

(8) The employment service has still to overcome the scepticism of employers and workers and to win their confidence. In most of the Far Eastern countries the service is still new and struggling, its motives are liable to be misunderstood, and its activities in relation to the nation's economy tend to be misjudged. As an agency competing with traditional recruiting methods, as well as with private agencies which are well established in certain specialised fields of employment, the public employment service is open to keen competition. Its opportunities, though necessarily somewhat restricted in a

post-war era of social, economic and financial disturbances, can only expand in relation to the increase of its own efficiency, which, in turn, will depend partly on the willingness of the Governments concerned to provide the funds needed and of the employers and workers to give the service a fair chance to compete on its own merits.

(9) The size and constitutional structure of many Asian countries complicate employment service organisation and operation. As in other large countries such as Australia, Canada and the United States, there is a clear need for a nation-wide service, capable of operating as a co-ordinated piece of machinery. The dimensions and character of current manpower problems require employment service machinery of equal scope. Precisely how this machinery shall be organised and what administrative relationships shall be established, especially in Federal countries, is, of course, a question to be decided by each country for itself.

These problems and difficulties are appreciated by the Governments concerned, and also by most of the employers' and workers' organisations. If anything, they serve to enhance the general realisation of the need for building up and strengthening the national employment services and of examining each problem closely with a view to finding the best solution possible in the circumstances. The achievement of this ideal will inevitably vary considerably from country to country in view of differing political, economic and social factors.

#### X. REGIONAL AND INTERNATIONAL CO-OPERATION IN SOLVING THE PROBLEMS

The solution of the manifold problems of employment service development in Asian countries is being sought not only at national and local operating levels, but also on a regional basis, as the agenda of the present Conference indicates, and on a world-wide basis, as is shown by the keen interest of the Asian countries in the problems of employment service organisation which were on the agenda of the General Conference in 1947, 1948 and 1949, and in the I.L.O. manpower programme, which emphasises employment service development. The experience of one country of a region with employment service

organisation can certainly be useful to another country with the same general problems, and the experience of the Asian countries as a group is a matter of international concern and may, in future, contribute greatly to world experience in this field.

The Employment Service Recommendation encourages the development of international co-operation among employment services, and such co-operation would promote greater technical efficiency in each national service and would assist in solving, by mutual effort, manpower problems of regional or international concern. This regional Conference may well wish to give special attention to some of the means of regional or international co-operation which would be most useful in developing good employment service machinery throughout the region. In particular, it may be able to suggest certain types of assistance which might be provided by or with the help of the International Labour Office.

## XI. PROPOSED BASIS OF DISCUSSION

This Conference is not a meeting of technical experts on employment service organisation. It is a tripartite assembly of representative officials of the Governments and of the employers' and workers' organisations of Asian countries. Its main purpose in connection with employment service organisation is thus to exchange views on the general problems of employment service development in the Far East and the ways in which these problems can be overcome, with particular reference to the importance of tripartite co-operation in the solution of the current difficulties. The Conference will doubtless wish to consider the application to Asian countries of the international standards set in the Employment Service Convention and Recommendation and to see how these standards might be supplemented with standards framed on a regional basis in the light of the special needs of Asian countries. It is in this sense that the following proposed resolution has been prepared.

### **Proposed Resolution concerning Employment Service Organisation**

Whereas policies of economic development with a view to the raising of living standards require the full utilisation of the skills of workers,

Whereas this can only be achieved through measures aimed at facilitating the employment and distribution of manpower according to requirements in such manner as to safeguard the essential needs of each branch of the economy, including agriculture, while eliminating underemployment,

Whereas the application of such measures requires the existence of machinery for promoting the employment of workers in the activities and occupations lacking an adequate supply of suitable labour,

Whereas the Preparatory Asian Regional Conference of the International Labour Organisation, held in New Delhi in 1947, emphasised the need for the further development of public employment services both for securing full use of manpower resources and as a useful preliminary to the introduction of measures for the relief of unemployment,

The Asian Regional Conference held at Nuwara Eliya from to January 1950 adopts the following resolution :

*Application of Standards set by International Regulation*

1. Each Government should undertake to examine with a view to application the principles and methods of employment service organisation incorporated in the Employment Service Convention, 1948, and the Employment Service Recommendation, 1948.

2. Each Government should undertake to examine with a view to application the provisions of the Fee-Charging Employment Agencies Convention (Revised), 1949.

3. In the process of implementing the principles of the International Labour Code relating to employment service organisation, appropriate arrangements should be made to consult employers' and workers' organisations, with a view to obtaining their full co-operation in the application of the said principles.

*Development of Regional Standards*

4. The Conference invites the Governing Body to ask the International Labour Office, in connection with the expansion of the manpower programme of the International Labour Organisation in Asian countries, to study, with the Governments and employers' and workers' organisations concerned, the special problems of employment service development in the Asian countries, with a view to formulating, in the light of regional and international experience, principles and methods of employment service organisation capable of encouraging the further development of such services on a solid basis.

5. The Conference suggests that for this purpose the Governing Body should consider the desirability of convening in Asia a meeting of experts on employment service problems,



the results of which should be communicated to the next Asian Regional Conference of the International Labour Organisation.

*International Co-operation*

6. The Conference invites the Governing Body to ask the International Labour Office to provide greater technical assistance to the Asian countries in respect of employment service organisation and for this purpose to consider the desirability of extending the activities of its Asian Field Office to include questions of employment service organisation and operation.

7. Each Government should undertake to co-operate, with the help where desired of the International Labour Office and its Field Office, in the supply and exchange of technical and other information and materials relating to employment service organisation and operation.

8. Regional and international programmes for the technical training of employment service staff should be developed with a view to overcoming the deficiency of Asian countries in respect of qualified personnel and promoting efficiency in employment service work.

9. The Conference requests the Governing Body to instruct the International Labour Office to study, through its Asian Field Office, further appropriate methods of international co-operation on technical problems of employment service organisation and operation with a view to contributing to the rapid development of such services in Asian countries.

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## PART II

### ASIAN CONFERENCE OF EXPERTS ON VOCATIONAL AND TECHNICAL TRAINING

#### I. Introduction and Reports submitted to the Conference

##### INTRODUCTION

The organisation and development of vocational and technical training at the present time constitutes a major problem for all Asian countries. It is true that the question is not a new one ; and for many years numerous measures have been taken to meet the manpower requirements of the various branches of economic activity, both quantitatively and qualitatively. Since the last war, however, these efforts have increased considerably, especially in view of the marked tendency towards industrialisation of the countries in that region.

In addition, under the joint impetus of the International Labour Organisation and of the United Nations Economic Commission for Asia and the Far East, international action has supported and guided national efforts. This development has taken on a variety of forms, all of which, however, aim at the same object, thanks to the co-operation between States and international organisations.

The Preparatory Asian Regional Conference of the International Labour Organisation (New Delhi, November 1947), adopted a resolution which emphasised the significance for Asian countries of vocational and technical training. This resolution invited the Governing Body to instruct the Office "to study, with the assistance of the Governments concerned, the facilities for vocational training now available in Asian countries and in the light of international experience to suggest practicable measures for extending and improving them".<sup>1</sup>

The United Nations Economic Commission for Asia and the Far East also adopted two resolutions : one during its second

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<sup>1</sup> Cf. *Training Problems in the Far East, op cit.*, Appendix III. Resolutions adopted by the Preparatory Asian Regional Conference of the International Labour Organisation (Geneva, 1948) (I L O. Studies and Reports, New Series, No. 11).

session (Baguio, December 1947), and the other during its third session (Ootacamund, June 1948), both of which contained specific recommendations on practical measures to further the extension of training facilities.<sup>1</sup>

In pursuance of these resolutions, the International Labour Organisation, in close co-operation with the United Nations Economic Commission for Asia and the Far East, has taken a number of measures to give practical effect to the aforesaid recommendations :

(1) In June 1948 an expert of the International Labour Office joined the secretariat of the Economic Commission for Asia and the Far East and carried out an enquiry in all Asian countries with a view to ascertaining what vocational and technical training facilities were in existence at the time and also what obstacles prevented these countries from developing such facilities. The results of these investigations, together with the information already collected by the Economic Commission for Asia and the Far East, are to be found in a report entitled *Training Problems in the Far East*.

(2) The Governing Body of the International Labour Office at its 107th Session (Geneva, December 1948) decided to set up a tripartite Manpower Committee for Asia. It provided that the terms of reference of this Committee should cover all manpower problems, but that the question of vocational training should at the present time be given priority over other aspects of the manpower programme.

(3) The Governing Body also decided to establish an I.L.O. Field Office in Asia, to deal with manpower problems.

(4) It agreed in principle that a Conference of Technical Experts on Vocational and Technical Training in Asia should be convened.

The Asian Manpower Committee held its first session at Geneva (4-8 March 1949), and discussed its general programme of work, the organisation of the Field Office in Asia and the preparation of the Conference of Experts on Vocational and Technical Training in Asia.

At its second session (27 May 1949) the Committee noted that the Field Office was in process of being established and that the Director had been appointed. During the same session

<sup>1</sup> Cf *Training Problems in the Far East, op cit*, Appendix IV Resolutions adopted by the United Nations Economic Commission for Asia and the Far East.

the Committee proposed that the Conference of Experts should meet at Singapore and make recommendations concerning the agenda of the conference and the outline of the reports to be prepared.

At its 109th Session (Geneva, June 1949) the Governing Body adopted the Committee's proposals.

The four reports have been drawn up on the basis of the outline adopted by the Governing Body. It should be noted that they are not documentary in character, since the report entitled *Training Problems in the Far East* includes a survey of existing facilities. These four reports are not intended to describe the present position, but rather to outline the practical problems inherent in the establishment of a vocational training policy and in the technical and material organisation of training facilities, in such a way as to indicate or suggest certain solutions that could be recommended to Governments or could serve to guide the work of the Field Office in Asia.

Information concerning the manpower programme of the International Labour Organisation in Asia was also communicated to the Economic Commission for Asia and the Far East at its fourth session (Lapstone, Australia, December 1948). At the conclusion of this session a resolution<sup>1</sup> was adopted, which took note of the activities undertaken by the International Labour Organisation and reaffirmed the continuing interest of the Commission "in the question of technical training in relation to economic development of the region".

The resolution requested—

(a) the International Labour Organisation to make reports to the next and subsequent sessions of the Economic Commission for Asia and the Far East on the progress made in this field ;

(b) the Executive Secretary to consult with the Director-General of the International Labour Organisation for the purpose of establishing the closest possible working relationship between the two organisations in the region ; and

(c) the Executive Secretary to prepare a report regarding those fields of economic development which are handicapped by the lack of trained personnel.

In accordance with the closing paragraph of this resolution, the Secretariat of the Economic Commission for Asia and the Far East has begun the preparation of the report, and to obtain the information needed has sent a questionnaire to the Members

<sup>1</sup> Document E/CN 11/176, 10 Dec 1948, United Nations Economic and Social Council.

and Associate Members of the Commission asking the specific numbers and types of trained personnel shortages for the most important specific projects in the current plans of economic development. The information so collected will also be utilised by the International Labour Organisation, in assisting the Asian countries to meet the training needs thus indicated.

The close co-operation now established between the Secretariat of the Economic Commission for Asia and the Far East and the International Labour Organisation, working with the countries concerned in Asia, will enable these countries to achieve their objective of economic and social development.

## REPORT I. GENERAL ORGANISATION AND DEVELOPMENT OF TECHNICAL TRAINING

### *Necessity of Training*

The organisation and development of technical training in Asian countries are undoubtedly a basic element in the execution of the economic development plans which these countries have prepared and are endeavouring to carry out with a view to raising the standard of living of their people.

Technical training is, in fact, the key to industrialisation, and it is necessary to train supervisory staff and technicians for the management of undertakings which are being established or expanded. It is equally indispensable to enable the workers to acquire the occupational skills necessary for the performance of any new tasks to be entrusted to them. No matter how ample the available capital and machinery, these can be utilised only to the extent to which a sufficient number of adequately qualified personnel is available.

The scope of training is by no means limited to large-scale industries. The development of agriculture, the urgency of which is evident, is impossible without properly trained personnel, fully conversant with modern methods of organisation and operation. Furthermore, a large number of workers will continue to be employed in small-scale and cottage industries. India, for instance, has already over 13 million persons engaged in handicrafts, and a similar situation prevails in other Asian countries. It is equally necessary, therefore, to provide technical training for future handicraftsmen.

Technical training, furthermore, is to a very large extent

essential for increasing productivity, which is a vital question for Asian countries. Attention has often been drawn to the low level of manpower efficiency in these countries. Although in intrinsic qualities the Asian worker is in no wise different from his counterpart in other regions of the world<sup>1</sup>, it must be noted that a number of factors tend to reduce the efficiency of labour in the Far East. The principal among these are : poor physique ; illiteracy ; absence of industrial tradition ; haphazard methods of selection and placement ; lack of adequate training of ordinary workers and supervisory staff ; and, in some cases, an enervating climate. The climate, of course, is a permanent factor and beyond control. The other factors, however, which are a serious impediment to increasing the efficiency of workers, can be remedied, and steps should be taken to mitigate their influence.

Poor physique, which is due to various causes, such as undernourishment, disease, poor housing, insanitary conditions, lack of medical care, is a serious handicap to training, particularly for industrial occupations requiring considerable vigour and sustained effort for long hours.

Widespread illiteracy is the greatest obstacle to the development of technical training. This seriously limits the possibilities of training, and impedes the promotion of workers to higher posts, which, in countries of other regions, are frequently filled from the ranks.

Industrial workers, who are largely recruited from rural areas and retain strong ties with their native village, often lack industrial tradition and any strong interest in their occupation. This not only tends to make them indifferent to improving their skill by further training, but also accounts to a certain extent for the hesitation on the part of employers in providing adequate facilities for training.

The traditional method of recruitment in the Far East through jobbers, contractors or other intermediaries, is another factor which has hindered the organisation of a proper system of selection, placement and training of workers. The establishment of employment services should, however, help considerably to reduce its effect.

<sup>1</sup> The Labour Investigation Committee of the Government of India observed in its *Main Report* (1946), that "granting more or less identical conditions of work, wages, efficiency of management and of the mechanical equipment of the factory, the efficiency of Indian labour generally is no less than that of workers in most other countries". This is equally true of workers in other Asian countries

No matter what steps are taken in this regard, the organisation of an extensive and appropriate system of training is essential for increasing efficiency. Rational utilisation of machine tools, increase in the individual worker's output, and satisfactory administrative and technical organisation of the undertaking, which are important factors in production, could be secured only through properly skilled personnel, which is able not only to carry out the work assigned to it but also to understand its significance and to make quick adjustments to the changes in the technique of production.

### *Importance of Skilled Personnel.*

The importance of skilled personnel for carrying out a policy of industrialisation and of increasing production with a view to raising the standard of living is brought out by the wide variety of jobs and of industries for which it is at present required.

In general, skilled personnel may be classified, on a functional basis, into three groups : production personnel ; supervisory and managerial staff ; and administrative and welfare personnel.

Production personnel comprises employees directly engaged in production. It includes, according to the degree of occupational ability, unskilled, semi-skilled and skilled workers. Until recently, technical training was considered necessary only for skilled workers. Unskilled and semi-skilled workers were engaged for production work without any previous training.

At present, however, most industrially advanced countries have realised the necessity of providing technical training for all types of production personnel. The contents and duration of such training must, of course, vary according to the type of personnel concerned. It may last for a few days in the case of unskilled workers, a few months in the case of semi-skilled workers, and for several years when skilled workers are concerned. The basic importance of the change, which is now reflected in current practice, lies in the value of a systematic organisation of technical training for all production workers, so that they may adapt themselves to their tasks as adequately and rapidly as possible.

Supervisory and managerial staff comprises all persons, in different sectors of the undertaking, responsible for the organisation and direction of production. It also includes

engineers and technicians, who, although not engaged in supervisory duties, carry out research or practical application at a comparable level.

This personnel plays an essential role in the undertaking, and therefore requires, it is considered, three types of training—technical training, general education and instruction in the direction and organisation of production. The last type of training has acquired great importance during the last few decades. Production depends, to a large extent, on effective co-ordination between the different sectors of an undertaking ; and it has accordingly been realised that supervisory staff ought to have, apart from occupational knowledge and technical skill, the ability essential for directing persons under them and organising their work ; such ability can be developed through proper training.

Finally, the administrative and welfare personnel, both in undertakings and in public administration, also plays a very important role. It is obvious that efficiency of public administration depends to a large extent on the technical ability of its personnel. This is equally true of private undertakings, which ought to have properly trained and qualified supervisors capable of understanding different aspects of the problems facing management and personnel and of solving them in the common interest of all concerned.

As regards the trades and occupations concerned, on the other hand, the importance of skilled personnel is not confined to large-scale industry. It is equally important for agriculture, where increase in production requires improvement in technical equipment, and perhaps still more the entry of workers trained in the new methods of production and conversant with scientific progress in agricultural matters. Similarly, methods of production at present employed in cottage industries are often traditional and involve inefficient and laborious processes. The output of these industries needs to be improved in both quality and quantity ; this is impossible without giving handicraftsmen adequate training in modern methods of production.

### *Shortage of Skilled Personnel.*<sup>1</sup>

In answer to an E.C.A.F.E. questionnaire (1947) requesting the different Governments of the region to state the present strength of their trained personnel and to estimate what addi-

<sup>1</sup> Cf *Training Problems in the Far East*, *op cit* , Chapter II, pp 101-119.



tional numbers would be required to meet their short-term (1947-1949 inclusive) reconstruction programmes, the majority of the Governments stressed the great difficulties involved in an assessment of this nature, and not all of them sent direct replies. All countries except the Philippines, however, indicated—on the basis of approximate estimates—a shortage of skilled personnel.

As stated in the introduction, the Secretariat of the Economic Commission for Asia and the Far East, in accordance with a resolution adopted at the fourth session of that Commission, has undertaken to prepare a report concerning the fields of economic development which are handicapped by shortage of trained personnel. This report will be based on the replies to a questionnaire to be sent to Governments, which will ask for detailed and specific information on shortages of manpower for the execution of particular projects.

In India, the Scientific Manpower Committee (1947), which undertook to investigate the needs in technical personnel for the four or five following years, although unable to arrive at a comprehensive and precise conclusion, in view of the lack of adequate data on the personnel already available and uncertainty regarding the possible intensification of the country's industrialisation, estimated that in the case of engineers and other technicians of high grade alone, normal requirements of private industry (excluding the requirements of provincial Governments for their public works projects) would be four times greater than the outflow in 1946 of graduates from the higher technical education institutions.<sup>1</sup>

The Pakistan Minister of Law and Labour stated in February 1949 that one of the main problems in Pakistan was the training of a sufficient number of skilled workers for rapid industrialisation of the country. A Scientific Manpower Committee was established in 1947 to assess the requirements for technical and scientific personnel.

In Ceylon, the Committee on Apprenticeship, set up at the end of the war, concluded that until 1949 or 1950 it would be necessary to recruit engineers from abroad if a large reconstruction programme was to be undertaken.

Employment service returns in India and Pakistan indicate however that, together with a surplus of unskilled workers and

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<sup>1</sup> These estimates correspond to the then expected execution of existing plans for economic development. It is possible that they should be modified.

clerical staff, there is a serious shortage of skilled workers, such as machinists, turners, draughtsmen, moulders, fitters and mechanical engineers.

The available information appears, if not to warrant definite estimates, at least to indicate certain general tendencies :

1. The types of personnel for which training would be required are so extensive and varied that to specify them in most cases would be to list practically all classes of skilled personnel necessary for mechanised production and for the development of industry and agriculture.

2. There is a definite shortage of skilled workers required for the manufacture, installation, operation, maintenance and repair of machinery of every kind, particularly that required for power projects, mining, mechanised agriculture, transport and heavy industries such as iron and steel, manufacture of chemicals, etc.

3. Improvement of the technical skill of personnel, particularly of supervisory staff, is essential for increasing production in agriculture, handicrafts and industry.

4. The training of engineers and technicians is not sufficiently co-ordinated with the rhythm of industrial development.

It is necessary, therefore, to improve and develop facilities for technical training in Asian countries in close co-ordination with actual needs and concrete development plans.

#### *Adjustment of Training Programmes to Industrial Requirements*

The adjustment of training programmes to the needs of the economy is both a fundamental requirement and a difficult problem to solve

In fact, any training programme is effective only to the extent to which it secures an equilibrium between labour requirements, both in number and quality, and manpower resources. Such programmes, therefore, must be based on a previous analysis of these two factors, which are constantly affected by economic fluctuations and technological changes. Furthermore, where industrial development plans have been prepared, the pace at which they can be implemented depends on a number of factors other than manpower, and these frequently affect the estimates on which employment and training programmes are based. It is necessary for the authorities concerned, therefore, to keep training facilities and manpower needs and resources under constant review.

In this respect, however, the object should be, not so much to compile exact statistics, which are difficult to secure even for industrially advanced countries, and are subject to frequent modification, as to ascertain general trends and—as exactly as possible—their amplitude. On the basis of periodic estimates, regularly revised and improved, training facilities can in the end be adjusted to industrial requirements. A number of methods may be employed for this purpose.

*Study of Manpower Needs and Resources.*

Available information concerning general economic conditions and the employment situation may be used for the purpose of determining manpower needs and resources.

Since short- and long-term changes in the level of employment depend essentially on the pace and direction of economic development, it is necessary to follow closely the fluctuations and trends in production. This requires close collaboration between the authorities concerned with economic problems and those responsible for employment and technical training. It is essential that such co-ordination be established on a permanent basis, and that the representatives of these authorities meet frequently at various levels. Furthermore, employers' associations and other influential economic organisations are able to provide interesting information, either of a general character, concerning particular branches of industry or on special aspects of the manpower problem. Such information may be of precise significance for the establishment and development of training programmes, and proper liaison with these organisations is essential also for determination of manpower requirements. Industrially advanced countries attach much importance to it. To facilitate these contacts and exchanges of experience, the Pan-Indian Council on Technical Training has been established; this includes representatives of the National Planning Commission and of numerous occupational organisations concerned with economic development (associations of employers and industrial workers and also of technicians).

Furthermore, it is an important responsibility of employment services to collect data concerning manpower requirements and resources, both present and future. The extent to which this function can be performed undoubtedly depends upon the stage of development of the service. Where it is highly developed, annual manpower budgets can be established;

but this will require many years in the case of Asian countries, where employment services are of comparatively recent origin.

Even at the present stage of development, however, analysis of employment and unemployment statistics is in all cases a factor of great significance for the development of vocational training. The reliability of these statistics depends, of course, partly on their collection and interpretation, and partly on the extent to which they cover the principal branches of activity and the various regions. But such an analysis will always indicate the general trends of manpower demand and supply, as well as the branches of industry and occupational groups in which these trends arise. Also, employment service inspectors such as are to be found in the Philippines, who make regular visits to the undertakings in their districts in order to collect data on manpower needs and effective vacancies, are certainly in a position to obtain a fairly accurate impression of the fluctuations in various fields of economic activity if manpower statistics are not available. Such statistics and information of a general character may be supplemented by other agencies concerned with manpower problems, such as labour inspection and social security services ; these can often provide useful data on variations in the personnel of undertakings. Taken together, the material just described would throw valuable light on the situation, and help to clarify the nature and scope of vocational training problems.

Finally, more direct methods may be used in order to obtain a closer view of the facts. These comprise, for instance, enquiries in industrial undertakings, either throughout one or more regions or industries, or in a carefully selected sample. This method of statistical investigation is successfully employed in a number of countries, and is spreading ; but it requires highly qualified personnel, capable of organising and applying methods of sampling after careful calculation of the margins of error.

Difficulties in the determination of precise manpower requirements have led a number of countries to create agencies for the specific purpose of analysing these needs by the most appropriate methods. In India, for instance, the Scientific Manpower Committee was established for this purpose in 1947.

The problem, then, is to develop and apply various methods of investigation, adapted to the economic and social conditions of the countries concerned and to effective possibility of

application in each case—methods which, with the aid of cross-checking, may give reliable results. The essential task is to establish a system on a sound basis and improve it gradually in the light of experience.

*Adjustment of Training Programmes to Specific Needs.*

Although an estimation of manpower needs and resources lies at the basis of any policy concerning vocational training, a number of problems still remain to be solved before training facilities may be adapted to the specific needs of the industry.

As these needs are generally extensive and varied, it is difficult to establish an order of priority, having regard on the one hand to their urgency and economic importance, and on the other hand to the practical possibility of developing training facilities. Vocational training may be directed at various objectives, and several possible courses are open.

*Choice between various branches of activity.* As a matter of principle, training for all the principal branches of activity (agriculture, handicrafts and industry) should be expanded simultaneously ; but if shortage of resources renders this impossible, a choice must be made among them and initial efforts confined to the preferred sector.

The same question may arise also within each branch, as between the various trades and industries which it includes.

*Choice between different types of manpower.* The importance of qualified personnel throughout production has already been emphasised. The ideal solution would be to develop systems of training at all levels. But this is not always possible, and in such cases it may be necessary to give priority to the training of engineers and technicians, or supervisory personnel, or skilled workers, as the case may be.

*Choice between different types or training.* It must be determined whether the problem of vocational training is essentially one of quantity or of quality. It is possible, for instance, that the number of supervisors or skilled workers is sufficient, but that their occupational qualifications are not advanced enough to secure desired productivity. In this case, the main effort must be directed towards improving skills and raising the level of initial instruction rather than towards training larger numbers of employees.

It must be pointed out, however, that the establishment and extension of some types of training is in practice conditioned by the development of certain other types. For instance, it is very difficult to establish a good system of technical education without capable instructors, or a good system of apprenticeship if the supervisors and skilled employees required to pass their knowledge on to the trainees do not reach a sufficiently high technical standard. The development of training for these higher groups of personnel must therefore often precede any extension of technical education and apprenticeship.

Nevertheless, priorities with regard to vocational training should not be considered as established once and for all. Vocational training is a dynamic problem, in a perpetual state of evolution, and it is imperative that the data relating to it be re-examined at sufficiently frequent intervals in order to redirect its organisation and development in the light of the changing situation.

Furthermore, when material—and particularly financial—resources are limited, the best solution is to seek training systems which, under equal conditions of efficiency, allow for the most rational and economic utilisation of the means available. For example, it would be useless to create new training opportunities if those in existence were little or wrongly used. One of the first objectives of any adjustment of training facilities to needs should therefore be to increase to the maximum the quantitative and qualitative yield of existing training institutions. Furthermore, the creation of a system of technical schools is generally a long and costly process, whereas industry can offer technical training facilities which it is relatively easy to put in operation. This may be a factor of decisive importance in the drawing up of a short-term training programme.

In short, a solution for these various problems cannot be found without close examination of the numerous factors involved, carried out in close collaboration by the administrative authorities responsible for vocational training and the employers' and workers' organisations concerned.

### *Facilities for the Training of Young Persons*

The distinction between facilities for the vocational training of young persons and the training or retraining of adults is based primarily on differences of aim, and secondarily on differences of organisation. The trainees' age is one of the

less absolute criteria in this regard. In fact, senior students at long-term training courses for adolescents, and young persons concluding higher technical studies, are often older than many trainees attending courses for adults. The essential distinction lies rather in the fact that the "adult training" is intended for persons who have either an occupational background and habits of work, or at least some practical experience which can and ought to be taken into account in the organisation of training facilities for them.

The training of young persons, on the other hand, is designed for individuals whose physical and mental development is not entirely completed, and aims at initiating them into occupational life. As a result, it should be sufficiently comprehensive to provide for their future and make them as adaptable as possible to the changing requirements of the labour market during their occupational career. To the extent to which these exigencies are taken into account, training programmes for young persons will be more diversified and comprehensive than those for adults, and will last for a longer period.<sup>1</sup>

For the same reasons, theoretical instruction occupies a more important place in the training of young persons than in that of adults. It is necessary to give future workers, as far as possible, skill and knowledge which will enable them to keep abreast of the technical progress and adjust themselves to the new requirements of production. Moreover, being a long-term training, it ought to be integrated into a long-term economic policy, with a view to avoiding major errors in the trend of training such as might result in unemployment. In other words, it is particularly important that precautions be taken with regard to training facilities for young persons, so that candidates may be directed into different branches of training in accordance with estimates of long-term employment prospects.

The above remarks hold good irrespective of the method selected for the organisation of vocational training. For consideration of the technical aspect of the problem, however, training facilities should be classified under two separate headings: vocational instruction provided in schools, and tech-

<sup>1</sup> This is true of comprehensive training. But many young persons cannot, of course, for economic reasons, pursue training for several years. Facilities for the accelerated training of young persons are therefore also necessary.

nical training given in industry, through regular apprenticeship or on the job.

The types of training for an occupation which fall under these two headings differ in respect of conditions as well as methods of training, and also differ with regard to the legal status of the persons concerned.

Although persons who receive their training in an undertaking are bound to it by terms of employment (contract of employment or apprenticeship), students in a school are generally not in any such contractual relationship. While conditions and methods of training in an undertaking are subject to the requirements of productive work, training in schools can be conducted exclusively with educational aims in view. Consequently theoretical instruction usually plays a less important part in undertakings than in schools ; besides, schools are obviously, as a rule, better for providing this kind of instruction ; on the other hand, training given in the undertaking aims at preparing young persons for a more immediate start in their occupation. For these various reasons, recent years have witnessed the development of mixed training systems, comprising a practical course in the undertaking and a theoretical course at school. Such systems are easily adaptable to different training levels (beginners, improvers, higher technical personnel).

### *Importance of General Education and Vocational Guidance*

All types of vocational training require a certain standard of general knowledge on the part of the trainees ; the effectiveness of the training largely depends thereon. In this respect, illiteracy evidently constitutes the greatest handicap for those responsible for the organisation of training, since it is hardly possible to train persons who can neither read nor write beyond a very rudimentary level. But even where such elementary knowledge exists, vocational training cannot advance at a normal rate and attain the required level unless it can be founded on basic education received as a rule in primary schools.

Since the training of young persons generally takes place on the conclusion of their schooling or may be regarded as a continuation thereof, it is normal and useful that particularly close co-ordination should be established between the two forms



of instruction. Where this exists, efforts are made as far as possible to make use of the knowledge acquired at elementary school and to bring it up to the required standard. To this end, additional courses in general education are added to the vocational education courses, properly so called. When training is given in a school, these courses can often be integrated with the theoretical aspect of vocational education. On the other hand, in the case of apprenticeship and other forms of in-plant training, special supplementary courses have usually to be organised, apart from the training programme, or at any rate outside the undertaking to which the trainee is apprenticed, at the nearest school.

It is certain that, as a result of the low level of primary education in Asian countries, and of the fact that for reasons of tradition or of practical difficulties numerous children destined one day to become industrial workers fail to complete their primary schooling and therefore lack a thorough grounding, the authorities responsible for the syllabuses of technical schools are compelled to include in the said syllabuses a good deal of general culture, particularly science (*e.g.*, arithmetic, geometry, physics, etc.).

This part of the syllabus is much more extensive than would be the case in technical schools in more developed countries. In the circumstances, this overburdening of the syllabus is no doubt inevitable. This fact has the additional inconvenience of prolonging the duration of technical studies when the gainfully-occupied population in these countries urgently requires to reach the stage where it can perform remunerative work. Thus, the excessive duration of vocational training discourages a number of students—who are in need of this training in order to make provision for their future—from taking the course, or else induces them to abandon their studies before they have completed it. This fact raises a grave problem and demands an extensive re-examination of the following items :

(a) training syllabuses, taking into account the need for supplementary instruction, while at the same time condensing the training period as much as possible ;

(b) the livelihood of underprivileged students attending these schools, with a view to giving them an opportunity, from the time they enter vocational school, to earn small amounts of money by their own efforts to repay, at least partially, the sacrifice made by their families in depriving themselves for a

period of years of the full wage which they would have received had they placed their children in employment as soon as they reached the minimum age for admission. This practice is already in force in the Philippines.

The acquisition of general education prior to, or during, training is an important factor in the development of vocational training. Nevertheless, its success also largely depends upon the manner in which each student chooses his future career. The vocational guidance services provide the students with an opportunity to take a decision based upon fact. These services, which are in a position, on the one hand, to furnish useful information concerning the various occupations—general characteristics, possibility of securing employment, and training required—and, on the other, to examine the applicants (at the very least, a physical and a medical examination), and to assist them in making their choice on the basis of the results obtained, do a great deal to remove certain prejudices for or against the various occupations, and make a certain preliminary choice possible by disclosing preferences, physical and intellectual capacities, and various characteristic peculiarities.

The student or apprentice will obtain worthwhile results during this vocational training course providing that the occupation chosen is suited to these capacities. Indeed, tests have been made to prove that an informed choice and rational selection may lead to a shortening of the training period and is liable to reduce accident risks. It would therefore be well for candidates for vocational training to have the benefit of the vocational guidance services, either during primary school, in conjunction with vocational training facilities, or in some other way (through independent bodies or by services attached to the employment service). Where proper vocational guidance services cannot be organised, it is possible to adopt the practice met with in certain underdeveloped countries of Asia and the American Continent. This practice consists in making the first-year curriculum in vocational schools sufficiently general in character to meet the needs of students entering pre-apprenticeship schools with a view to selecting a field of future specialisation. It might be desirable to consider what subjects should be included in the first-year curriculum and what methods applied (practical experience in various workshops in the school, either concurrently during one week or fortnight, or consecutively in the course of the year) to give each student the best

possible chance to gain a knowledge of the various branches of activity, and to make his choice among them.

*Vocational and Technical Schools.*

Methods of vocational training in schools may be grouped into three categories, according to the type and the aim of the instruction given.

First of all, the school may be used as the sole method of giving the pupils complete training, theoretical and practical, prior to their seeking employment (full-time schools). Next, it may serve as an up-grading course for workers already employed (generally optional courses given outside working hours). Lastly, by means of theoretical and general education, it may supplement the practical training given in undertakings (compulsory supplementary courses for apprentices).

The organisation of the whole process of training in school is justified above all in the case of trades properly so called requiring a rather high degree of occupational skill and a certain amount of accurate and well-assimilated theoretical knowledge. In addition, such trades should offer the possibility of fairly constant and fairly regular openings, sufficiently lucrative to justify the economic effort which the continuation of studies entails for the majority of the population of each country. In most non-Asian countries, technical schools which meet these conditions largely confine themselves to the study of mechanics, electricity, civil engineering, building, tin-plating, locksmithing, carpentry, cabinet-making, etc. Other types of training, as in the case of various handicrafts, may obviously be required to meet the needs of national or local industries, and even in the case of the aforementioned occupations each country or part of it compels the choice of certain trades rather than others, according to the demands of its economy and the state of its production.

The criticism has often been made that school training is too theoretical and that it does not fully meet the needs of employers. Indeed, in some Asian countries (Southern Korea, for example, at the end of the war) new systems of training have been established parallel to the existing network of technical schools, because these proved almost useless to meet new requirements. In order that school training may remain as useful as possible, close contact should exist between technical schools and industrial and agricultural undertakings in each

country, particularly with a view to ensuring that the practical knowledge of the instructors is kept constantly up to date, and to revising the programmes accordingly. The Conference might suggest measures to be taken to secure such co-operation on the basis of experiments already made in this field by some Asian and non-Asian countries.

The organisation of up-grading courses enables the workers on the job to remain conversant with technical advances in their occupation, to learn methods of work and production techniques different from those they have occasion to apply in the undertaking in which they are employed, and, finally, to acquire new skills which may make possible their promotion to a higher category.

As for the organisation of supplementary courses in schools for young persons receiving their training in an undertaking, such courses are absolutely necessary in a great many cases, particularly where undertakings lack sufficient funds to provide such instruction. Certain Asian countries (China, for instance) have tried to make arrangements for fairly large industrial undertakings to organise, at their own cost, theoretical and practical training facilities within the undertaking for the general and vocational education of their staff. Other countries, particularly Ceylon, after a careful examination of the situation, have decided to give in technical colleges the theoretical courses to supplement practical apprenticeship in undertakings, as well as up-grading courses. On the basis of these experiments, the Conference might discuss the measures to be adopted with a view to making the most effective use of both systems or, if necessary, to recommend the method which has proved to be the most successful.

### *Apprenticeship.*<sup>1</sup>

In all countries of the world, in-plant training is the traditional method of training workers in the practical and technical requirements of production. In the classical form of family and handicrafts apprenticeship, as in the forms of industrial apprenticeship directly derived therefrom, it presents considerable advantages as a means of training, but has frequently given rise to abuses, the most grievous of which are :

1. Undue extension of the pseudo-apprenticeship.

<sup>1</sup> For the definition of " apprenticeship ", see footnote on the following page.

2. Absence of any real effort at training, the "apprentice" being occupied with tedious small jobs or even—illegally—unskilled heavy work, and receiving in fact no systematic training in the specific operations of his future trade.

3. The number of "apprentices" too high in proportion to the total number of employees in the undertaking.

4. Recruitment of "apprentices" who are too young, in the absence of any regulations concerning this question, or in defiance of such regulations where they exist.

5. Excessive hours of work.

6. Inadequate remuneration or the failure to provide any remuneration.

7. Poor food, hygiene, and rest (especially in the case of apprentices who live in), etc.

8. The fact that it is impossible for the "apprentice" to acquire the supplementary general instruction which he needs.

In addition to these particularly serious abuses in so-called "family" undertakings, there are others connected with the recruitment of "apprentices" for branches or occupations which, in fact, do not require any vocational training (*i.e.*, errand boys in small commercial undertakings).

Such systems, which are apprenticeship in name only, must disappear. Their total abolition is an indispensable condition for real economic and social development.

On the other hand, provided that the persons concerned are given appropriate safeguards<sup>1</sup> in the form of regulations, collective agreements or in any other way, genuine apprenticeship often constitutes the only practicable form of training, and in any case the only one accessible to the majority of young persons wanting to learn a trade.

Taking into account the demands of modern production, two different forms of apprenticeship can be distinguished at

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<sup>1</sup> Such as those enumerated in Recommendations Nos. 57 and 60 adopted by the International Labour Conference in 1939 and in the resolution concerning vocational training adopted by the 3rd Conference of the American States Members of the International Labour Office (Mexico City, April 1946). See also, in the first of these texts, the definition of "apprenticeship" (Recommendation No. 57, Paragraph 1 (c)): "For the purpose of this Recommendation the expression 'apprenticeship' means any system by which an employer undertakes by contract to employ a young person and to train him or have him trained systematically for a trade for a period the duration of which has been fixed in advance and in the course of which the apprentice is bound to work in the employer's service".

present ; apprenticeship organised in small-scale and cottage industries, and apprenticeship organised in large undertakings.

The former generally reproduces the traditional conditions of the organisation of training in undertakings : the near-family atmosphere, the empirical methods, and the duration determined by custom and not by a rational study of the trade. It is usually found in connection with traditional manufacturing methods. Modernisation of these methods, however, particularly a more or less advanced degree of mechanisation of all or a part of them, is bound to lead, sooner or later, to a reconsideration of the methods applied for the training of future craftsmen, involving a more systematic form of training in the skills of the trade. Delegates could consider what are the best means of hastening this systematisation of training, and in particular, how heads of small-scale and cottage industries could be made aware of the advantages inherent in the organisation of training based on a rational study of their trade.

The risks of organised apprenticeship in large undertakings are of another kind. Apprenticeship is justified only when an entire trade is to be learned. Owing to the division of production and labour in such undertakings, however, the apprentices are in danger of being given an insufficient and incomplete course of training in the workshops to which they are sent. This danger can be overcome by the establishment of well-planned programmes which provide for training to be given in every phase of the trade. In some cases, the requirements of such programmes can be met by placing the apprentices in each of the various workshops of the undertaking in turn, indeed in several undertakings specialised in the same branch of industry, in succession. In other cases, the most appropriate method is to give all or part of the training in the workshops, as distinct from the production shops. This is, more particularly, the method adopted by India (eighteen months in special centres, followed by eighteen months in an industry).

The organisation of apprenticeship, particularly in large undertakings, gives rise to a number of general questions which are beyond the scope of individual undertakings. One of these is to find ways and means to stimulate the desire of the young persons for proper training, for otherwise they may, to their own detriment, prefer incomplete short-term training. The delegates might be invited to express their views on the

desirability of instituting educational and publicity activities to this end. Such activities, however, could not be successful unless they enjoyed the assent and support of the employers' and workers' organisations.

### *Training on the Job.*

Apart from apprenticeship, most undertakings afford part-time training facilities, initial or supplementary, to young persons who were unable to complete a full apprenticeship course and who show sufficient ability to rise above the rank of unskilled labourer. Such facilities are specially developed in industries employing a large percentage of semi-skilled labour (for instance, textiles, large metal trades undertakings, etc.). When this kind of training is organised on rational principles its duration can be shortened to a minimum. It is desirable that, as far as technically possible, syllabuses for training by successive stages should be established for young workers trained under these conditions, and that they should be given a chance of promotion, to enable them step by step to add to their occupational knowledge and thus finally to learn a complete trade. Here again, the understanding and support of the employers' and workers' organisations are indispensable. Interesting examples of such systems in India are provided by such large firms as Tata and Bata, and in China by the national corporations. The main problem, therefore, is not to devise new systems in Asia, but to broaden the fields in which certain experiments have already been made and to make the results more widely known.

### *Facilities for the Training of Adults*

In recent years, experiments in many non-Asian countries have shown that training facilities available to adults must be adapted to their particular requirements. Initial or supplementary training for production work is bound to differ from that for young persons, not only in terms of its extent and duration but also of the method of instruction, because if such training is to be useful to them it is preferable that—for the same trade—it should not follow the same curricula or be taught by the same methods as are applied in the case of young persons. In particular, it is preferable to reduce theoretical instruction to basic ideas necessary for the understanding of the work. In

addition to the educational reasons for special short-term training of adults, there exist, in the case of unemployed adults, obvious economic reasons ; adult candidates for training generally have heavier responsibilities than young persons and are hardly in a position, in the circumstances, to pay for prolonged training for a trade. For the same reason it is necessary that the training facilities provided should be as effective as possible, and also as well adapted as possible to their particular requirements and to the immediate employment possibilities that may occur.

Conditions in regard to up-grading courses for persons already employed differ from those just mentioned because the financial position of the trainees is, as a rule, less precarious than that of the unemployed ; they differ also because workers to be trained are free only outside their working hours. The organisation of training in this case is, therefore, closely related to the conception and application of the regulations regarding daily and weekly hours of work. The delegates could make statements on conditions and possibilities in this connection in their respective countries. In any case, however, it would be well to substitute long-term training for rapid training without making any basic change in the methods of instruction utilised in the training of unemployed adults. Japan has tried out these systems ; its conclusions could undoubtedly be made to apply to other Asian countries.

Finally, apart from initial and supplementary training for production personnel, training facilities for adults should also include methods of preparing them for the promotion to supervisory, or indeed, to managerial posts. In the latter case, the nature of the teaching and the type of curricula and methods required will naturally differ from those employed in the training of production workers, but the general conditions under which the training takes place are similar to those of any of the other staff already employed. However, it would be well to consider to what extent such training might or should be supplemented by probationary periods in different industrial undertakings, or facilitated by the award of scholarships.<sup>1</sup>

The extent and nature of the necessary vocational training facilities for adult workers depends naturally on the number

<sup>1</sup> Cf. International Labour Conference, 33rd Session, 1950, Report IX (1) . *Vocational Training of Adults, including Disabled Persons* (Geneva, I.L.O., 1949).



and type of skilled workers required by the industry as well as the number and categories of adults likely to benefit by such training. Experiments made in non-Asian countries in this respect took place under conditions that varied considerably from country to country, depending on whether the object of the adult training was to attenuate an unemployment crisis by means of the occupational rehabilitation of unemployed workers, or to remedy a shortage of skilled labour. When, as seems to be the case in the majority of Asian countries, these two circumstances co-exist, it may be well simultaneously to put into operation carefully considered training facilities of all types, which have been successfully applied abroad<sup>1</sup>, or at least those the utilisation of which seems possible in Asia and appropriate to its conditions.

Various types of training facilities are set forth below. As in the case of training for young persons, a few preliminary remarks will be made concerning the degree of general knowledge which potential trainees should possess.

#### *Importance of General Education.*

The remarks regarding the necessity of basic education prior to any vocational training apply to adults as well as to young persons. But the problems arising therefrom when large masses of illiterate population are involved are more difficult to solve when systems of rapid training have to be organised (as is generally the case in the training of the general run of adults), than in the case of long-term training for young persons. These difficulties are aggravated by the fact that adults, at least above a certain age, generally find it more difficult to learn than young persons. In any case, the problem of the general education of adults cannot be solved on the same lines as that of their vocational training. The large-scale efforts made in recent years in the Far East to eliminate illiteracy and to further general education for adults, are certainly the most effective means of eventually securing the basic knowledge so necessary to vocational training. For limited groups of adults selected for specific training it would perhaps be well in the meantime to devise special systems of training as required, in which the essential general knowledge to be acquired would be integrated, as far as possible, with the remainder of the vocational training programme. Delegates

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<sup>1</sup> *Idem.*

might be invited to express their views on the possibility and desirability of devising methods of this kind.

### *Vocational and Technical Schools.*

For comprehensive adult training, many countries resorted first of all to the facilities provided by vocational and technical institutions. This has certain advantages, particularly when, for material, financial or technical reasons, it is not possible to organise special training facilities for adults (centres, training workshops in the industry, etc.) ; but for the sake of efficiency the courses and programmes must be adapted to the requirements of the adults. The admission of adults to the ordinary courses in these schools should, therefore, be avoided as far as possible.

On the other hand, it is perfectly permissible to make use of the facilities available to schools to organise theoretical and supplementary courses for adults receiving practical training in undertakings, and for those desiring to improve their vocational knowledge while employed.

The main problems arising in this connection are those of timetables, of the standardisation of training syllabuses and, in rural or semi-rural districts, of the accessibility of the schools. Here again, delegates will doubtless wish to discuss the possibilities offered by existing institutions in various Asian countries.

### *Training in Centres.*

Another way of training adults would be to set up special centres. Although more costly than training schools, because the centres must be properly equipped, this solution commends itself from many points of view, most of all because a suitable locality can be selected for the centres. Secondly, it enables the centre to be run under the most suitable conditions, and training methods best suited to adults to be applied ; furthermore, training programmes can be adjusted to the needs of industries and trades which will absorb the manpower so trained. Several Asian countries have experimented with training in special centres during and since the war. It would be interesting to have the opinion of the delegates as to the significance and the results of these experiments and the desirability of their being proceeded with.

*In-Plant Training.*

Provided that it is adapted to the needs of the adults, the advantages of in-plant training are substantially similar to those inherent in training in centres, and such training enables a still greater adjustment of the training to the particular requirements of production in the undertakings providing it. For this reason, some non-Asian and some Asian countries have in recent years introduced systems of rapid in-plant training.

Furthermore, in recent years, in certain non-Asian countries (especially the United States) it has been found useful to adapt normal conditions of training, by means of full-length apprenticeship, to the needs of certain categories of adults (especially ex-servicemen). It would be worth while to examine how this type of training might develop in the Far East and, if necessary, to encourage managements to utilise it.

*Training of Supervisory Staff.*

The training of supervisory staff raises special problems, the importance of which until recently had not always been understood. Young persons trained in vocational schools for supervisory posts often gain only slight technical knowledge and general culture, and no understanding of the duties of supervisory staff.

In modern industry, these tasks include in particular rather extensive responsibilities connected with instruction, since the supervisory staff must acquaint the workers with their jobs and, if necessary, train them altogether. Thus the training of supervisors is of particular importance and urgency in the Far East, as such training can do much to expedite the initiation of local manpower into the conditions of modern industrial life.

To this end, facilities for methodical supplementary training of new supervisory staff, as well as of that already established, can be developed within the undertakings. Complete systems of training similar, for instance to those adopted in recent years in various foreign countries<sup>1</sup>, may likewise be devised and set in motion.

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<sup>1</sup> Especially in the United States, and in a number of European countries

*International Movement of Trainees*

For more than a century a large number of trainees from countries of this region have been sent abroad for training, or to perfect their knowledge. As a result, considerable experience has already been acquired in this field. In recent years, however, the organisation of training abroad has been much criticised. According to certain authorities in this region, the results obtained have not been commensurate with the efforts undertaken and the expense incurred. The reasons alleged in support of this view have been, *inter alia*, the inadequate selection of candidates for training, the lack of co-ordination between training syllabuses abroad and present manpower requirements, the difficulty in finding appropriate training facilities, particularly in relation to practical experience in certain undertakings which use patent manufacturing methods, the lack of organisation and supervision of training given abroad, and, finally, the inadequate measures to ensure the appropriate placement of trainees upon their return.

Nevertheless, despite these criticisms it is generally acknowledged that training abroad is essential in the case of certain categories of staff for whom no appropriate training facilities exist within the region. In India, for example, commissions of enquiry created for a number of industries by the Department of Industry and Supplies have recommended that a small number of persons should be sent abroad each year for advanced training. In Pakistan, the first Conference on Education, which was held at Karachi in November 1947, also recommended that the Government authorities, in all trade agreements for the purchase of machinery and other supplies, should make arrangements for the inclusion of a clause providing for the training of a certain number of students in the countries supplying these products.

It is thus necessary to make use of training abroad in the case of certain categories of skilled personnel, at any rate while vocational training for this category is not sufficiently developed on a national scale. This problem has been exhaustively dealt with in one of the reports prepared for the third session of E.C.A.F.E.<sup>1</sup>, and in the I.L.O. report, *Training*

<sup>1</sup> UNITED NATIONS ECONOMIC AND SOCIAL COUNCIL, Economic Commission for Asia and the Far East: *Report and Recommendations on Training of Technical Personnel in the Economic Field and the Use of Expert Assistance by Governments* (E/CN./11/83, 26 May 1948).

*Problems in the Far East.*<sup>1</sup> For this reason, no attempt will be made to treat this question in detail in the present report, which rather constitutes an attempt to summarise the essential aspects of the problem and to suggest to the Conference practical steps which might be taken in this field.

*Personnel Requiring Training Abroad.*

In principle, the practice of sending students abroad for vocational training may apply to all categories of skilled staff for whom no adequate facilities exist in their own country. This question may arise in relation to the following categories :

- (a) managerial staff ;
- (b) engineers and technicians ;
- (c) supervisory staff ;
- (d) skilled workers ;
- (e) instructors in vocational training institutions ;
- (f) administrative staff in public services, particularly

that responsible for the organisation and development of vocational training.

In the past, schemes for training abroad have, in varying degrees, concerned one or another of these different categories. At the same time there was, perhaps, no clearly defined policy to determine requirements and priorities, in order to enable the best possible utilisation of the training facilities offered by the various countries.

Thus, the first step to be taken in this connection might be to establish what categories of staff should be granted priority for training abroad. In this connection it is important to emphasise the point that the essential aim should be the constitution of a nucleus of qualified staff who, on their return, would be able to organise and develop vocational training systems, or to initiate new workers in modern industrial methods. If this principle were adopted, the categories of staff eligible for training abroad might be, first of all, managerial and administrative staff, engineers and technicians, instructors in vocational training centres and schools, and staff in the administrative services. The training syllabuses now in use for these categories of staff should accordingly be examined, and extended or improved where necessary, in order to attain effective results as quickly as possible.

<sup>1</sup> *Op. cit.*, pp. 126-131.

*Training Facilities Abroad.*

The nature of the facilities available for training abroad varies according to the categories of trainees in question. Thus, apart from the case of students who go to technical schools to receive vocational training—a system of training which is now well developed and reasonably well organised—there are two separate problems, according as the trainees belong to the category of administrative staff and that of vocational training instructors, or to the category of industrial staff (supervisory staff, engineers and technicians). In the case of the former, the training facilities should be found in national administrations or possibly in international organisations, while that of the latter category should comprise periods of practical training in industrial undertakings.

In the beginning, it would doubtless be possible in the case of the countries in this region to envisage training a small group of officials now responsible for vocational training, or who could be designated to undertake these duties upon their return from receiving training abroad. This programme might comprise, say, three stages :

(1) A training period with the International Labour Organisation devoted to studies of the various national systems of legislation relating to vocational training, and the steps taken by the different countries for its organisation and development.

(2) A training period with one or more national administrations in industrially developed countries, to acquire the necessary practical experience.

(3) A final training period in the I.L.O. Field Office in Asia.

The problem of the training of instructors abroad is dealt with in the report on the recruitment and training of instructors.<sup>1</sup> At this point it is sufficient to emphasise the importance of such training with a view to the subsequent development of vocational training facilities on a national scale.

The sending abroad of engineers and technicians involves problems which are more difficult to solve. It is not always easy to find industrial undertakings suited to provide training ; nor is it always possible to find undertakings willing to receive trainees. The solutions to this problem are of a much more individual nature and should doubtless be carefully studied,

<sup>1</sup> Report III. See below, p 130

in close co-operation with the employers' and workers' organisations. The I.L.O. Field Office in Asia might undertake this study, first of all within the framework of the countries in this region and then at the international level.

*Problems Connected with Training Abroad.*

Whatever the categories of trainees involved, the organisation of training abroad raises important problems which must be solved in order to ensure the value of the results which it is hoped to attain. Chief among these would appear to be that of training syllabuses, of the choice of candidates, and of securing appropriate training opportunities and their financing.

The establishment of training syllabuses should clearly take into account the requirements that take priority, alike with respect to branches of activity and to categories of staff. In the past many of the criticisms levelled at training abroad have arisen from inadequate preliminary planning; and it would certainly be worth while to determine whether the various general plans now in preparation or in application in this field really take account of present economic needs.

The selection of trainees is clearly a matter of capital importance. Steps have been taken in the various countries of the region to set up selection machinery. These efforts should be carried forward and if necessary improved upon with the assistance of the I.L.O. Field Office. It is particularly important that attempts should be made to ensure as far as possible that the experience acquired by the trainee will be fully utilised in his country upon his return. The experts might discuss the preliminary conditions to be met by trainees and the methods of selection to be applied to obtain results which alone can warrant the expenses incurred in respect of training abroad.

Finally, a variety of means of financing training periods abroad may be devised, such as appealing for material aid to Governments, to industry, or to various private organisations which are extremely active in this field.

The granting of scholarships is a traditional means of financing study abroad. This method of financing has so far applied mostly to students. It could be more systematically extended to civil servants or to industrial workers desiring to undergo periods of vocational training abroad, either in public administrations or in industrial undertakings.

The industry could also extend effective aid to Governments by itself awarding scholarships, or else by concluding arrangements for the payment of a regular wage to trainees sent abroad. A certain number of countries, such as Belgium, Bulgaria, Denmark, Finland, France, the Netherlands, Norway, Sweden, Switzerland, the United Kingdom and the United States, have concluded bilateral agreements designed to facilitate the international movement of trainees. Some agreements contain a provision whereby the trainee is to receive a wage from the undertaking where he works, calculated on the same basis as that which applies to the regular staff of the establishment.

To secure training facilities in industry, as well as in national administrations, requires an active effort of organisation if it is to result in offers reasonably in keeping with the demand and of a guaranteed value. Machinery should therefore be established to stimulate offers or to seek them out and also to make possible an inspection of the technical and material conditions offered to candidates and of such preparatory measures as may be necessary in order to take advantage of them. In this connection there is reason to consider whether the establishment of tripartite committees to examine offers to receive trainees would not be useful. Such committees could work in close collaboration with the I.L.O. Field Office in Asia.

These practical problems of organisation will doubtless call for different solutions according to the type of training abroad that is required and perhaps also according to the various countries concerned. Nevertheless, the Conference could examine these problems with a view to laying down certain general principles likely to further their solution, and it might outline effective action to be taken by the Governments and the I.L.O. Field Office in Asia.

#### *Administrative Organisation of Training*

A training programme which truly meets the need of the economy should comprise various types of training, as applied by the public authorities or by private initiative, by varying methods. To ensure that this programme develops within the framework of a comprehensive plan, it is therefore necessary to set up an administrative organisation in a position to take into account the various interests involved, and capable of co-ordinating the measures for its implementation.



The measures taken by the various countries in the matter vary according to the object of the training course, the administrative traditions, and the general policy followed. Consequently, there could be no question of proposing a uniform solution in this field. The essential point is to arrive at a clear and objective definition of the vocational training policy and also to ensure that the training systems in application fit in with a well co-ordinated general plan.

*Authorities Responsible for the Different Training Programmes.*

The organisation of vocational training is but rarely placed in the hands of a single authority. In general it is divided among a number of administrations in accordance with a variety of rules which may, however, have certain principles in common.

The needs of the workers to be trained constitute the first criterion on which the division of responsibilities is based, together with the economic and social position of each. For example, the responsibility for the training of young workers generally rests with the administration in charge of public education, in view of the necessity of integrating this training in general educational policy. Adult training, on the other hand, is frequently entrusted to the Ministry of Labour, since the persons in question are already engaged in an occupation. Similarly, the responsibility for the training of disabled workers is in some cases divided among the authorities handling such matters as health, social security, labour or those responsible for war veterans, while in other cases only one of these authorities may deal with the matter.

Another criterion for the division of responsibilities is the economic activity for which the training is given. Thus, the Ministry of Agriculture is often responsible for the training of agricultural workers, and this applies equally to other industries such as mining, arms manufacture and the mercantile marine.

There are also different methods of dividing administrative responsibilities among the central, regional and local authorities, whose role may vary in nature and scope according to the administrative traditions and the political structure of each country.

These distinctions, however, are never absolute, they are intended, first and foremost, to clarify the situation. They

should never be regarded as an attempt to place the various administrative authorities concerned in watertight compartments, for their activities are bound to overlap. Thus, even in countries where the vocational training of young workers and that of adult workers is in the hands of the Ministry of Education and the Ministry of Labour respectively, the organisation of apprenticeship is frequently entrusted to the latter, while the Ministry of Education plays a leading part in the organisation of training for adult workers, particularly in technical training schools.

In the countries of this region also, the administrative responsibilities for vocational training are widely scattered, and the Conference might perhaps consider whether this division of responsibility is based upon clear and rational principles and whether it might possibly be useful to define such principles with a view to recommending their application to the Governments concerned.

#### *Co-ordination of the Various Programmes.*

While the public responsibility for vocational training requires clear definition, it is of the utmost importance that adequate machinery should be created in cases where this responsibility is divided among various authorities, so that these responsibilities may be co-ordinated in such a manner as to ensure that the vocational training policy is guided by a unified conception and unified action.

Such co-ordination generally requires the creation of machinery for the permanent and systematic co-operation of the various authorities involved. To this end, a large number of countries have set up advisory committees to give advice on the drawing up and development of a training policy and on the steps required to put it into effect.

The nature and composition of these committees may vary to a large extent. They are mostly composed of representatives of all the interested parties, to ensure the broadest possible view of training requirements and of the desirability of the measures to be taken. In other cases, smaller committees are organised to ensure co-operation between the administrative services concerned. In France, for example, there is an advisory committee composed of representatives of the Ministries of National Education and of Labour, which is responsible for the

special task of co-ordinating the activities of the two administrations in question in the matter of vocational training. Certain countries have also set up industrial advisory committees to give advice on the application of the vocational training policy in one particular field.

Nor is the need of co-ordination confined to the central administration. It may also be found at the regional and local levels where the systems of training are, to all intents and purposes, put into application. These regional and local committees have a twofold responsibility. They are responsible for the application of the measures decided upon at the national level, and they further adapt these measures to regional and local needs and make these needs known to the national authorities. Such committees have now been set up in several countries, such as Australia, Canada, France, New Zealand, Sweden and the United States.

It would clearly be worth while to examine the conditions under which these various aspects of the co-ordination machinery operate and to consider whether a recommendation should be made concerning the measures required to develop and improve the functioning of such machinery.

### *Co-operation of Employers' and Workers' Organisations.*

Vocational training is a matter in which close co-operation between employers' and workers' organisations is not merely useful but indispensable, otherwise there would be a serious risk that vocational training might not at all times be closely related to industrial realities and that it might not meet the real needs of undertakings. In a number of countries, co-operation between employers' and workers' organisations in the establishment and implementation of a vocational training policy in practice takes the form of their serving on the different advisory committees mentioned above. Moreover, employers' and workers' representatives may be called upon to take a more active part in the organisation and functioning of technical training schools and training centres and in the putting into operation of apprenticeship schemes for the different industries. Steps to this effect have been taken in Australia, for example, where appropriate industrial committees, composed of representatives of employers' and workers' organisations, periodically assure themselves of the pupils' progress and see to it that training is given under good conditions. In France, similar

committees take part in the administration of adult training centres established or subsidised by the State.

When training takes place within the undertaking, employers' and workers' representatives take an even more direct share. The actual training rests for the most part with the management, but the success of the syllabus depends upon the entire staff of the undertaking—from the management, via the foremen, to the unskilled workers. Experience has shown that co-operation between management and staff greatly increases the chances of success of any training system applied in an industrial undertaking.

Since this aspect of the question is of such importance, the Conference might consider ways and means of stimulating and developing co-operation between employers' and workers' organisations in matters of vocational training.

*Co-ordination of the Training Provided by Public Authorities with that Given by Undertakings or Private Organisations.*

It is clear that vocational training activities should be closely co-ordinated, irrespective of whether they are carried on by undertakings, private organisations or public bodies. Such co-operation should enable the aforesaid bodies to compare notes on their experiences, not merely with a view to deriving positive lessons therefrom, but also in order to stimulate their development and to establish the general principles which may be expected to give them fresh impetus.

The task of developing this co-ordination normally rests with the public authorities, who alone are in a position to ensure that public and private activities in the field of vocational training supplement one another in a positive manner; and in a number of countries the competent public authorities have begun to play an active part in this respect.

Various means may be employed to this effect. For example, advisory committees on which employers' and workers' organisations are represented are already doing important work on these lines. Meetings, study circles, conferences or congresses may also be organised to examine general training problems or to discuss special questions of particular importance.

The Conference might consider such practical means as may be suggested for the establishment and development of such co-operation, in order to associate in the task of vocational

training all public and private bodies, industrialists and workers' representatives, as well as any other institutions engaged in the development of education, vocational guidance and training.

### Points for Discussion

#### A. MEASURES TO BE TAKEN AT THE NATIONAL LEVEL

1. Necessity of defining the economic and social objectives of a vocational training policy within the framework of the agricultural and industrial development plan.

2. Steps to be taken to adapt vocational training programmes to the manpower requirements of the industries concerned. Methods recommended to determine these needs, such as, for instance—

- (a) a more systematic study of economic and labour market trends ;
- (b) the conducting of first-hand enquiries ;
- (c) the establishment of bodies or special services to analyse these needs.

3. Desirability of establishing an order of priority for the drawing up and development of training systems :

- (a) selection where necessary of the branches of industry and categories of personnel to receive the training initially provided ;
- (b) priority to be granted to the training of juveniles or adults, should the facilities available not be adequate to meet the needs of these two categories simultaneously ;
- (c) preference to be given to the development of certain training systems more suitable for adaptation to the needs of the countries in the region or which can be more easily organised (technical training, apprenticeship, training on the job, training of adults in centres, training of supervisors).

4. Measures to be taken to replace or to supplement general education :

- (a) possibility of providing basic education for adolescents and adults receiving training, or to improve their general knowledge ;
- (b) possibility of establishing and developing general education courses in the vocational and technical schools and centres which would be preliminary or supplementary to technical training ;
- (c) possibility of organising special courses, part-time or evening, for the general education of adolescents or adults receiving training on the job.

5. Study of the structure of the network of vocational and technical schools to be established or developed :

- (a) different types of schools to be set up, namely :
  - (i) multiple initiation into manual work, including training, for example, in elementary metal and wood work, as well as notions of building and, where necessary, of textiles ;
  - (ii) trade schools for training skilled workers ;
  - (iii) schools for training intermediate grades of supervisory staff and technicians in the industry ;
- (b) different types of courses to be arranged for in these schools :
  - (i) pre-employment courses ;
  - (ii) supplementary trade training ;
  - (iii) theoretical instruction for workers receiving on-the-job training ;
- (c) relative importance of the different types of schools and the various training courses.

6. Organisation of apprenticeship systems for handicrafts and industry :

- (a) measures for the enactment of apprenticeship legislation establishing the rights and obligations of employers and apprentices, and conditions for the organisation and supervision of this method of training ;
- (b) desirability of instituting a national apprenticeship committee in each country, composed of representatives of employers' and workers' organisations and representatives of the Ministries competent for economic development and vocational training ;
- (c) steps to be taken to organise a Government service having at its disposal skilled staff capable of promoting the development of apprenticeship in undertakings.

7. Desirability, in the case of adolescents who were unable to enter technical schools or to undergo apprenticeship, of making provision for other systems of training on the job.

#### TRAINING OF ADULT WORKERS

8. Study of the training facilities to be organised in schools for adult workers :

- (a) desirability of organising special training centres ; practical results to be realised in this connection ;
- (b) establishment in technical training schools of beginners' or up-grading courses for adults ; necessity of theoretical training courses for workers receiving training on the job ;
- (c) practical means of organising such courses (full-time or part-time courses, evening courses).

9. Organisation of in-plant training for adults :

- (a) training facilities to be set up :
  - (i) for qualified staff (semi-skilled and skilled workers);
  - (ii) for supervisory staff ;
- (b) different types of training courses :
  - (i) pre-employment or retraining courses ,
  - (ii) supplementary trade training ;
  - (iii) general education or theoretical instruction courses.

10. Provision of training for supervisory staff in such subjects as . initiation into personnel management, organisation of the work and job instruction.

11. Measures to be taken to establish or develop an appropriate administrative organisation :

- (a) methods for dividing the administrative responsibility for the development of facilities for vocational training ;
- (b) machinery to be established to ensure at the local, regional and national levels the full co-operation of—
  - (i) public agencies concerned with education, training, employment and economic matters ;
  - (ii) representatives of employers' and workers' organisations in industry and in agriculture ;
  - (iii) other associations concerned with youth questions, with vocational guidance, and with vocational training.

12. Development and improvement of programmes for training abroad, in particular with respect to—

- (a) categories of persons who should be granted priority under this system of training ;
- (b) formulation of plans for training abroad ;
- (c) choice of trainees ;
- (d) investigation of appropriate methods of training ;
- (e) financing of periods of training.

B. MEASURES TO BE TAKEN AT THE INTERNATIONAL LEVEL

13. Collecting, and making available to the countries of the region, international documentation concerning the general organisation and development of training.

14. Consideration of the assistance which might be given to the countries of the region by the Field Office, in particular with respect to :

- (a) formulation of training plans ;
- (b) administrative organisation needed to apply such plans ;
- (c) determination, in co-operation with the Economic Commission for Asia and the Far East, of the needs for trained manpower, in order to make the appropriate adjustment in training programmes ;

- (d) determination of priorities for putting such programmes into effect ;
- (e) organisation and development of training abroad.

15. Desirability of training abroad a nucleus of officials who would occupy key positions in the organisation of vocational training. Possibility of putting such a programme into effect in collaboration with the I.L.O. and its Asian Field Office.

## REPORT II. MATERIAL NEEDS AND PROBLEMS OF TECHNICAL ORGANISATION

### *Introduction*

This report examines the material conditions, and the basic methodological principles arising from experience, which appear most appropriate to the success of the training schemes that have been undertaken or are being pursued in the countries taking part in the present Conference. An effort has been made to consider the general requirements of vocational training with due regard to the particular conditions prevailing in these countries, and to bear constantly in mind the real possibilities of immediately applying the methods which it is suggested should be introduced.

The report falls into two parts. The first part reviews the material facilities required for the initiation and development of efficient training schemes. These facilities may be classified in three groups : equipment (machinery, tools, supplies) ; buildings ; school furniture and instructional material (books, black-boards, films and other visual or aural aids to instruction). The subdivisions of this first part correspond to this classification.

The second part is devoted to an examination of the types and systems of training calculated to meet the demand for skilled personnel in the different sectors of the economy, and the educational and methodological principles the application of which is likely to secure a maximum of efficiency for such training systems. Separate examination is given to the organisation of training in schools and centres, to schemes appropriate for training within the undertaking, and to the problems of co-ordination raised by the development of these various methods.



### *I. Material Needs and Possible Ways of Meeting Them*

The material facilities required to implement a training programme naturally vary with the nature of the training, its objective and the type of person for whom it is intended. For instance, the building and equipment of a school, centre or training workshop must meet certain requirements characteristic of the type of training in question. In the same way, the layout of the premises and the material to be used will vary with the trade or industry and the class of prospective trainee. Again, the problems of practical execution and of finance take a different form according as all or part of the training scheme is undertaken by the authorities, by private bodies or by the establishments which will employ the personnel trained, and—in the last case—according as these establishments do or do not have recourse to “training on the job”.

Nevertheless, the requirements to be met and the difficulties to be overcome share certain characteristics whatever the type of training. In particular, the material facilities provided must be satisfactory in quality and sufficient in quantity, and the sites must be judiciously chosen, having regard to the location of industrial centres, the possibility of recruiting apprentices or other trainees, and the openings for employment which can be made available to them on conclusion of the course. Both geographical distribution within each country and occupational distribution (choice of trade) must indeed correspond as far as possible to the relevant importance of the different industries, and be determined in relation to the economic development of the country, technical progress and probable trends of employment.

#### *Equipment : Machinery, Tools and Supplies.*

Evidently, the possession of appropriate equipment is fundamental to the development of vocational training schemes. It is indeed hardly possible to provide efficient training without machinery or tools, or even with haphazard equipment that is incomplete, out of date or insufficient in quantity. The requirements of the region must be studied in this light, and the meeting of these requirements will be one of the first material problems to be solved in the organisation of vocational training.

Actual shortage of equipment—of machinery and even tools—is particularly severe in most of the countries belonging

to the region. War destruction considerably aggravated a situation which had already in many cases been recognised as unsatisfactory. In some countries damage and looting have made it impossible for a large number of schools—particularly technical colleges—to continue in operation; this is the case for instance in China, Burma and Malaya, where considerable efforts have, however, already been made to recover or replace the missing equipment.<sup>1</sup>

Apart from the heavy handicap which has thus for years paralysed or hampered the work for vocational training done by the authorities and certain private bodies, it is recognised that the expansion or renewal of the training equipment—machinery and tools—required to implement the economic development and industrialisation plans of the different countries must involve enormous expense. Furthermore, it is generally impossible to obtain or manufacture this equipment on the spot, or elsewhere in the region, and the difficulties raised by importing it are extremely grave.

These difficulties, it should not be forgotten, include customs barriers, import restrictions, etc.; transport problems; long waiting periods (or even refusal to accept orders); and the complications connected with clearing operations, exchange control, export of foreign exchange, and the particular monetary situation of each country. An inflation such as that which has occurred in China creates additional difficulties, which would only disappear with a change in the situation itself.

The problems of finance in the narrow sense raised by the provision of machinery and tools for training workshops, centres and schools, are similar to those which will be mentioned with regard to the construction of premises<sup>2</sup>, and are indeed closely related to the latter. But where orders must be given abroad, the difficulties are likely to be increased by various additional charges—customs dues, transport and insurance costs—and by an unfavourable disparity between the price level abroad and general purchasing power in the importing country.

The manufacture on the spot of at least part of the machinery and tools required for training schools and workshops would no doubt enable some of the above-mentioned difficulties to be overcome; this course nevertheless itself raises grave problems of finance, of supply (raw materials,

<sup>1</sup> U N E S C O *The Book of Needs, II* (Paris, 1949), pp. 14, 32, 34, 67, 68.

<sup>2</sup> See below, p 78

partly finished products, etc.) and of production planning. Furthermore, in so far as the machinery or tools required are new lines produced by industries at an early stage of development (and this is often the case), manufacture on the spot will itself probably be hindered by lack of appropriate equipment and by the insufficient skill of the manpower immediately available. This is indeed a vicious circle which it seems hard to break without technical and financial aid from other parts of the world.

Of course, the character and therefore the cost of the apparatus, machinery, tools, etc., required for training workshops, centres and schools, will vary according to the type and objective of the training itself. Training for the handicrafts or for domestic and rural industries does not in most cases require so many, or such complex, expensive and technically up-to-date machinery and tools as are required to train skilled labour in certain engineering trades, and particularly for the maintenance and repair of machine tools, mechanical transport, precision instruments (watches, for instance) and such home equipment as electrical fittings and radio sets. But even handicrafts and home industries, in so far as they are integrated into the development plans of the region, will be required to modernise their methods of work and use some forms of machinery (small motors, etc.); the equipment of training workshops for this type of industry must be in keeping with such development, and should even contribute to its promotion and acceleration. In general, therefore, the equipment of training workshops must meet a number of technical and educational requirements, the chief of which may be stated as follows.

The material, and particularly the machinery, required for each type of training should be sufficiently modern, in good working condition, appropriate to its instructional purpose and sufficiently varied, and each type of machine should be represented in proportion to its frequency and importance in use. As far as possible, workshops should be fitted with individually controlled machines. Care should also be taken to avoid over-specialised machinery (particularly when ordered from abroad), and any which has been made too much out of date by technical progress.

Next, the machines and tools available should be sufficiently numerous really to meet the trainees' requirements. The

number of machines required in each workshop should therefore be determined having regard to the size of the groups of trainees which are to use them ; and both from the practical and from the educational point of view it is desirable that sets of tools be individually held. Forecasts regarding the equipment of training workshops and centres must therefore be based, for each type of training and each trade, on careful study by tradesmen and instructors thoroughly informed of the technical requirements of the occupation and the most appropriate training methods.<sup>1</sup>

What has been said regarding machines, tools, etc., may be taken as applying also, *mutatis mutandis*, to the other supplies required for practical training work. These should be sufficiently abundant and of a quality appropriate to their instructional purpose, and regard should also be had to the possibility of having trainees engage in actual production in appropriate cases.

Lastly, it is most important that the equipment provided—and particularly the mechanical equipment—should be fully in keeping with the qualifications which it is desired to pass

<sup>1</sup> Cf., for instance, a list of tools and equipment compiled by the Indian Department of Labour (GOVERNMENT OF INDIA, Dept of Labour. *Cost of Tools and Equipment for Training Craftsmen for Industries : Consolidated and Detailed Cost Sheets* (New Delhi, 1946)). This list indicates the number of articles—with the cost price in May 1945 in a parallel column—which would be required for each group of 16 trainees when equipping training centres for about 20 trades, as follows :

*Engineering and metal trades*

Basic training  
 Draughtsmen (mechanical)  
 Electricians  
 Fitters  
 Grinders  
 Instrument-makers  
 Machinists  
 Turners  
 Wireless mechanics  
 Automobile mechanics  
 Electroplaters  
 Blacksmiths  
 Moulders  
 Plumbers  
 Tin and coppersmiths  
 Welders (oxy-acetylene)  
 Welders (electrical)

*Building trades*

Basic training  
 Bricklayers and masons  
 Carpenters  
 Patternmakers  
 Painters  
 Upholsterers

The I.L.O. Reference Service on Vocational Training has other lists of equipment of this sort, prepared for the use of training centres in certain western countries (particularly France and the United Kingdom). These documents could be made available, through the I.L.O. Field Office in Asia, for consultation by experts of the countries concerned in the region.

on to the trainees, and with the types of occupation which will give them the best and most rapid openings for employment.

All these requirements bring out the character and importance of the problem of ordering machinery, tools, etc., for training schools, centres and workshops. As is pointed out above, despite the high cost and the delays in obtaining imported machinery and tools, it may for the moment prove to require a longer waiting period and to be more difficult and more expensive to attempt to obtain such equipment on the spot or in the region. It would, however, be a valuable immediate step to promote the manufacture at home of articles intended subsequently to replace or supplement similar material of foreign origin.

In particular, it would be possible and desirable to have the workshops of medium and higher grade industrial schools produce part of the equipment which they—and the lower grade technical schools—themselves require. The manufacture of hand tools by pupils of industrial schools for their own use is indeed already a common practice. Some of these schools also undertake the manufacture of machine tools (lathes, punches, milling machines) or other technical equipment such as forges. Production of the sort could certainly be expanded, either by copying new models obtained from abroad or on the basis of drawings made by the instructor. This would be a valuable means of increasing the equipment available, provided the work in question is integrated into a training programme which takes due account of instructional needs. Industrial school workshops might also aim at improving the tools to be used in instruction for the typical handicrafts of the country, and indeed in these handicrafts themselves. This would introduce some creative imagination into the process of instruction.

In most countries of the region, the authorities have already paid attention to these problems and have prepared plans or considered possible solutions for them. The I.L.O. expert who investigated technical and vocational training in the Far East, and whose report was prepared and published in 1948, states that in India, for instance, committees responsible for studying vocational training problems—

have suggested various ways in which the Government can intervene : by granting a high priority to import permits for this type of equipment and instructing the purchasing missions abroad to endeavour to secure it ; by lowering customs duties on such equipment ; by encouraging local firms to manufacture such tools and

machines, and by allocating to institutions for technical training equipment from war surplus stock likely to be of use to them<sup>1</sup>

In fact, material aid has already been provided in some countries out of liquidated war stocks. Similarly, in Japan, the Supreme Commander for the Allied Powers has examined the possibility of giving vocational training establishments the use of material from undertakings liquidated as part of war reparations.<sup>2</sup> A scheme for free aid, of the kind provided by U.N.R.R.A., with a view to distributing engineering and electrical equipment to higher grade vocational education establishments, would certainly be desirable.

Lastly, as suggested by the I.L.O. expert in the report referred to above,

If donations are not forthcoming, it might at least be possible to negotiate international agreements under the auspices of an accredited international organisation, in order to facilitate the purchase of the required materials, by providing, for example, for exemption from the duties and regulations limiting the export of such goods<sup>3</sup>

As in the case of educational material, which is discussed below, the need for action here is extremely urgent. Only through such action will it be possible to break the vicious circle already mentioned; in other words, it alone can enable the whole process of economic and technical development to get under way. No progress in this field is possible, therefore, until definite decisions of the sort described have been reached and put into effect.

### *Buildings.*

The need for specially constructed or reconstructed buildings is not so imperative as the need for appropriate equipment. Indeed, in the last resort it is possible to house some classes and practical training, at least provisionally, in hutments or other light, rapidly erected and inexpensive accommodation<sup>4</sup>, or to use existing industrial or other premises as they stand. But such arrangements will be unsatisfactory in the long run; sooner or later the problem of constructing and fitting out special buildings will arise in addition to that of providing machinery, tools, etc.

<sup>1</sup> *Training Problems in the Far East*, op. cit., p. 113

<sup>2</sup> Allied Powers General Headquarters, Tokyo, Civil Information and Education Section *Education in the New Japan*, May 1948, pp. 311-312

<sup>3</sup> *Ibid*, p. 125.

<sup>4</sup> Cf below, p. 80

Of course, as already pointed out, the type of buildings needed will vary with the kind of training to be given. Training on the job takes place in actual industrial premises, and therefore requires only that these be sufficiently extensive; whereas training in special centres or workshops involves either the need for *ad hoc* buildings or the transfer to exclusively educational use of premises originally intended for other purposes. Training given in schools requires special buildings, comprising not only schoolrooms and other accommodation for theoretical instruction, but also premises appropriately arranged and equipped—and sufficiently large—for practical training, including in many cases workshops similar to those found in training centres and in industry itself. This basic accommodation must be supplemented by canteens, bathrooms, showers, privies, etc., and as far as possible by rooms for cultural and recreational purposes—libraries, reading rooms, lecture and cinema halls, game rooms—and sports grounds. Lastly, where the population is sparse—*i.e.*, particularly in rural areas—it may not be possible to equip each locality with sufficient facilities for training in the industries and occupations likely to provide openings suited to local labour; in such cases it will be necessary for some of the training establishments of the region to function as boarding schools—*i.e.*, to include dormitories and other appropriate accommodation—or for housing near the establishment to be placed at the disposal of the trainees.

Many different problems thus arise in connection with buildings and premises. They can only be satisfactorily solved after close study and a sound forecast of requirements; this must be integrated into a general construction policy, itself duly co-ordinated with the over-all economic and social policy of the country.

The first step is to determine the extent to which present training needs can be met by existing accommodation—buildings already used for educational purposes, or others (factories, barracks, etc.) which might be adapted rapidly and cheaply and prove a useful aid. There are few figures showing demand and supply in this regard in the regions concerned; but no doubt in most parts the previous shortages and imperfections have been aggravated by war damage, as in the case of machinery and tools. The data for all educational establishments contained in the recent U.N.E.S.C.O. report on the needs of war

devastated countries give an idea of the proportion of this damage.<sup>1</sup> In Burma, it is there stated, 50 per cent. of pre-war school buildings were totally destroyed and 30 per cent. suffered partial destruction.<sup>2</sup> In China, according to calculations made by the Ministry of Education, the total amount of war damage to educational institutions during the eight years of war was about 966 million U.S. dollars, nearly 40 per cent. of which was accounted for by destruction of buildings.<sup>3</sup>

The need for reconstruction, together with the demand for an increase over and above the accommodation available before the war (such an increase is generally considered throughout the region as indispensable to technical, economic and social progress), certainly raises grave problems. These vary in scope with the period allotted for their solution, the geographical conditions of the area where accommodation is to be provided or restored, the expected lifetime of the buildings, and the use to which they are to be put. As already stated, more or less provisional buildings made of light materials are less expensive and may be erected more rapidly than stone or concrete constructions.<sup>4</sup> Again, apart from the value of the land itself, the building of a school or centre will as a rule cost less when no long-term preparatory work (clearing, draining, provision of drinking water supply, etc.) has to be done, and when the necessary building materials and appropriate manpower can be found on the spot. Lastly, the method and conditions of financing such construction will vary according to whether the work is undertaken by private bodies or establishments having an interest in vocational training, or is to be paid for wholly or partly out of public funds.

Closely related to the problem of constructing new buildings or making good the damage caused by war, is that of maintaining, repairing, modernising and extending the buildings now in use. Without due maintenance, buildings are bound to depreciate in course of time until they become practically useless.

<sup>1</sup> U.N.E.S.C.O. *The Book of Needs, II, passim*

<sup>2</sup> *Ibid.*, p. 13.

<sup>3</sup> *Ibid.*, p. 30.

<sup>4</sup> In Burma, for instance, the schools destroyed by bombing have been provisionally replaced in many parts by buildings of bamboo and other light materials; these are more or less rainproof, besides being light and airy; but it is estimated that they will not last more than three rainy seasons. In China it is not infrequent to see corrugated iron structures (made of U.N.R.R.A. materials) being used as dormitories for engineering shops (U.N.E.S.C.O.: *Book of Needs, II*, pp. 14 and 31).



Whereas the problems of labour and materials are less acute here than as regards new construction, the difficulties of financing are practically identical, in character if not in scale ; and these must be met both by private undertakings and other bodies which engage in vocational training, and in the case of schools and courses established and administered by the authorities. In order to supplement private capital and public finances, recourse to the credits made available by certain international institutions (the International Bank, for instance) may be regarded as an appropriate means of aiding and accelerating the provision of training premises.

In the preceding paragraphs regard has been had above all to the need for an increase in the quantity of school buildings and other training accommodation. But considerations of quality should be neither neglected nor underestimated. Whatever materials are used for construction, and whatever the geographical, climatic and other considerations prevailing in the district and on the site in question, the building must meet a certain number of requirements in respect of comfort, sanitation and health. Reference has already been made to the problem of the water supply. Considerations of a more specifically educational character must also be mentioned here : the buildings should comprise a sufficient number of spacious and well-lighted rooms, and, in the case of workshops, these must be suited to the installation of the machines and other equipment which will be used.

As has been said, satisfactory geographical distribution, adapted to the needs of the population and to those of national industry, is another material factor which should not be left out of account when training facilities are expanded. In this connection, the extent to which handicraft training institutions may use rural elementary schools, at least for part of their instruction, should also be examined in countries which have a sufficient network of such schools ; and the possibility of introducing peripatetic schools, in agriculture and cottage industries, for instance, might also be explored.<sup>1</sup> This would certainly enable some building costs to be avoided and consequently make it possible to concentrate available financial resources on other branches of training or on other necessary items of equipment.

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<sup>1</sup> Cf Burma's ten-year plan of technical education and vocational training. U.N.E.S.C.O.: *Book of Needs*, II, p 17

Furthermore, it is clear that the over-all policy governing the construction of schools and training centres or workshops in a region or country must have regard above all to effective possibilities and to the real need for skilled labour in the trades of the region or country at a given moment. Some degree of flexibility should remain possible as regards the allocation of part of the buildings and premises constructed. For instance, whereas permanent institutions should have their own school buildings, accelerated training courses can quite well be given in premises to be subsequently equipped and used for industrial production. Buildings planned with this double purpose have already been built in the United Kingdom since the end of the war.<sup>1</sup> For a study of these problems, and particularly that of the cost price of new and the transformation of existing buildings, it may be profitable to take account of practical achievements and experience in other parts of the world. If the Governments concerned should express the desire, the International Labour Office might request its Reference Centre on vocational training questions to collect—and to make available through the Asian Field Office—such plans of various sorts of technical schools as have been prepared with care and with the object of using available resources to the full with a minimum of expense. Of course, given the particular needs and difficulties of each country in the region, specific technical problems will arise in each case and the action taken will be far from uniform; but the above remarks, and an examination of plans and documents, might serve as a general basis and guide for the study of these questions.

#### *School Furniture and Teaching Material.*

A certain amount of furniture is evidently necessary in any school, training centre or training workshop. Besides tables, chairs and benches, there must also be an assortment of other gear such as lights, cupboards, shelves, classroom equipment (blackboards, teachers' desks, etc.) and in some cases furniture for kitchens, dining-rooms, reading-rooms, recreation rooms and dormitories. The problems relating to this type of equipment can be solved fairly easily and involve little expense. Not only can it all be obtained in the locality or region, and be made of home-produced materials, but also there is really no reason

<sup>1</sup> I.L.O. *Vocational Training of Adults in the United Kingdom* (Geneva, 1948), p. 36 (Vocational Training Monograph, No. 1.)

why a large proportion of it should not be made by the pupils of training centres and workshops belonging to certain trades (building, cabinet-making, paper-hanging, etc.). It will, however, be necessary to choose materials, styles and models best suited to the purpose in hand, and to establish estimates of the quantities required. Here again there will be an advantage in having lists drawn up with the aid of duly qualified persons. Indeed, although the customs of the particular country or region, and the materials and methods of work current in local industry, should be taken into account, international collaboration in the establishment of such lists might prove useful and would be easy to establish. Apart from the work already done in this field by such organisations as the International Education Office and U.N.E.S.C.O., it would be possible for the I.L.O. to collect the necessary information and make it available to those concerned.

Much greater difficulties arise as regards teaching material—books, stationery and other supplies necessary for written work and drawing; and visual and aural aids to instruction (diagrams; slides, films and the appropriate projectors; radio; gramophone records). Each of these classes of training material gives rise to problems of its own, which it will be well to examine separately.

*School books.* All the enquiries conducted in the region, and all reports on the subject, bring out the great shortage of training manuals and similar books and documents.<sup>1</sup> They show also how necessary it is to choose or prepare books which are both simple and appropriate for their educational purpose. Thirdly, attention is usually drawn to the importance of language and terminology and to the difficulties they cause.

Any suggestion, any exploration of ways and means of meeting the material shortage of educational books for students and trainees, as well as for their teachers, should be based not only on quantitative considerations, but also, first of all, on a study of the educational requirements which the material in question must fulfil.

In this regard, for vocational training purposes, it is most important that illustrations, figures, etc., should be both appropriate and clear, and that the general appearance of the books should be favourable. The greatest care should, of course, also

<sup>1</sup> Cf., *inter alia*, U.N.E.S.C.O. . . *Book of Needs*, II — Burma, p. 14; India, p. 58; Malaya, p. 78.

be given to ensuring that books really suited to the type of instruction and the standard of the trainees should be either prepared *ad hoc* or chosen from those available at home or abroad.

The problem of language, and in certain countries (China, for instance) of the characters used in writing, are similar to those arising in general education. It is accepted more and more today that for education purposes the vernacular is preferable to a foreign language; as the author of the above-mentioned I.L.O. report remarks:

Where, as in many Far Eastern countries, the technical terms have not yet been evolved in the national tongue and the necessary technical vocabulary is accordingly lacking, the creation of such a vocabulary is a difficult task. To overcome the difficulty, technical terms are usually borrowed from the particular foreign language best understood in the country in question. This rule, however, is not always adopted by all the technical training institutions in a country, and hence the specialists in a particular subject have no language in common. Furthermore, some textbooks utilise concurrently technical terms borrowed from several western languages, which is a source of confusion to the students. Thus, the question of establishing technical nomenclatures is another problem which confronts the authorities responsible for technical education in these countries<sup>1</sup>

The I.L.O. Field Office in Asia would no doubt be able to make a valuable contribution in this field. Indeed, the above-mentioned Reference Centre on vocational training questions already has a collection of teaching manuals and other material (tables, diagrams, blueprints) which it is striving to expand and to make accessible to the persons and organisations concerned. The Field Office might serve as an intermediary for communicating all or part of this material to those interested in it. The experts might also indicate how the collection should be enlarged—by the acquisition of other teaching material (industrial drawing boards, for instance) or by including technical dictionaries and vocabularies in use in various countries. They might also state their views as to whether, in this case, arrangements should be made for the loan, translation or total or partial reproduction of the books and documents which any country or institution might desire to use. The Field Office will also be able to give information on the principal methods that might be used to handle and preserve easily perishable materials. Lastly, it might serve as intermediary

<sup>1</sup> *Training Problems in the Far East*, *op. cit.*, p. 114.

for obtaining fresh copies of books from the countries of origin and sending these to persons who require them.<sup>1</sup>

The question of translating and adapting training manuals for supervisors was submitted to the meeting of European experts convened by the I.L.O. at Geneva during the spring of 1949. This meeting considered that all translations of training manuals which it might be useful to make should be properly adapted to the needs of the countries concerned. With this object, countries belonging to a given linguistic group and the I.L.O. should co-operate in providing such translations and adaptations. These principles might perhaps be extended to the countries represented at the present meeting, and apply to the preparation of model handbooks for the various types of training.

But the need for books and manuals does not raise technical and educational problems only. Not to speak of the at least temporary shortage of materials<sup>2</sup>, there are also financial difficulties similar to those already mentioned. Lastly, the need for books and other supplies raises an interesting social question: should school supplies be distributed free of charge?<sup>3</sup>

In all parts of the world, one of the chief obstacles to the general improvement of occupational skills is the low level of income of a large part of the population. Many families cannot bear the cost of extended education for their children. The situation is equally serious with regard to training for adults, who are expected to pay for their own keep and bear the cost of their instruction. The small help that would result from supplying books free (which are indeed often quite expensive) deserves examination as a possible relieving factor. The effort made by some Governments with regard to instruction at public schools should as far as possible be generalised, and in the field of technical education it might be supported and facilitated by international collaboration.

*School supplies.* The shortage of supplies (exercise books, ink, chalk, etc.) has also been reported from most countries in the region. In some, such as Burma, ordinary supplies—chalk,

<sup>1</sup> Recourse might also be had to the International Clearing House for Publications established by U.N.E.S.C.O. in so far as this service could extend its activity to material intended for vocational and technical instruction.

<sup>2</sup> This arises also with regard to other individual requirements such as paper, ink, chalk, etc. (see below under *School supplies*.)

<sup>3</sup> This question must be treated in conjunction with that of charging fees for technical instruction itself

pencils, slates, exercise books, nibs, penholders, etc.—have, at times at least, reached black market prices.<sup>1</sup> It may be asked, however, whether the problem here is not primarily one of regulating production and distribution inside each country. If so, it would lie mainly with the authorities, or with the institutions and undertakings which organise vocational and technical courses (and particularly theoretical classes), to make the necessary arrangements so that trainees shall receive a just and regular share of these supplies. If necessary, the question of additional external aid (gifts, credits, a quota system) should, of course, also be examined.

*Visual aids to instruction.* As stated above, the chief items under this heading are books, large-scale drawings and designs for demonstration purposes, and instructional slides and films. The difficulties which arise in connection with this type of equipment closely resemble those already mentioned when discussing books. Especially with regard to films, the problems are mainly of a technical or educational character, aggravated in some cases by difficulties of financing and of the supply of materials. As in the case of books, the choice of equipment appropriate to the educational purpose is extremely important. Old or badly made films, and those showing out-of-date apparatus or methods of work, are not only useless but actively harmful. The same may be said of foreign films portraying the use of techniques which are too new or are at present inapplicable in the region. Both sound films and those with sub-titles or accompanied by a text also raise the language question, which must be appropriately solved in each case. "Dubbing" in the national language or languages, or in the local dialect, involves additional expenditure and is perhaps not always practicable.

Unlike books and other means of instruction<sup>2</sup> which form a necessary part of the pupil's individual equipment or of the permanent collective equipment of the school, centre or workshop, films are essentially a type of instructional material which is appropriate for temporary use, and which may and should be moved from one school, centre or undertaking to another inside each country, or even—provided the language difficulties can be overcome—throughout the region or the world.

<sup>1</sup> U.N.E.S.C.O.: *Book of Needs, II*, p. 14

<sup>2</sup> Including wall pictures, as a rule.

The technical, material and financial difficulties which have been mentioned may in fact be solved by renting or loan arrangements. If there is no alternative, such arrangements may also be applied to projection apparatus, and this will enable the equipment of the hall to be reduced to a strict minimum.

Various forms of practical action in this field may be imagined. First of all, the activity of the I.L.O. Field Office in Asia, and of its Reference Centre on Vocational Training could be extended to include the compilation of lists and the establishment of a collection of films for technical education produced all over the world. The Reference Centre already has available some lists of this sort and a few films. Others can be obtained to meet specific requirements or needs. If the experts think fit, once it is satisfactorily equipped the Centre might organise a loan or renting scheme for all establishments concerned throughout the region.

Furthermore, it would be possible to make permanent arrangements for the exchange of films, either inside each country, or between several or all of the countries in the region, or again with other parts of the world. Such exchanges could be effected by public or private bodies, on the basis of agreements with the producers and with the establishments wishing to use the films, or through international organisations such as U.N.E.S.C.O. or the I.L.O. It will be for the experts to examine whether, how and to what extent the I.L.O. may help to facilitate the conclusion of such agreements.

### *Conclusion.*

The material problems which have been examined in turn—and the suggestions for their solution—reveal certain common features to which reference may now be made. Apart from questions of finance and raw materials, these all relate directly to precise technical requirements, and can only be understood and satisfied with the aid of specialists thoroughly conversant with technical progress and with training questions. The problems examined in this section are therefore closely concerned with those of determining curricula and methods; indeed, the action indicated above is in many ways no more than an extension of that required for the organisation of vocational training. A study of systems and types of training, which is contained in the second part of the present report, will bring out this interdependence between problems of method

and problems of materials, and will show that they should be treated, if possible, side by side within the framework of an organic plan for assistance of all kinds.

## II. *The Organisation of Vocational Training*

As far as organisation is concerned, vocational training facilities may be divided into two classes : training in schools and centres, and training in the plant. These differ profoundly with respect both to the conditions in which training is given, and to the principles and methods applied. The problems of organising vocational training may therefore properly be reviewed in two sections, one dealing with vocational or technical schools and similar institutions (workshop schools, training centres), and the other with the training facilities provided by undertakings themselves.<sup>1</sup>

### A. *Vocational Training in Schools and Centres*

#### *General Characteristics of this Type of Training.*

Institutions of the school type—schools in the traditional sense, or centres based on experience obtained in the western countries during the unemployment of the 1930's and during the Second World War, or establishments of a sort peculiar to the countries of the region—have evident educational advantages as a means of training skilled labour. If this method is used, pupils can be properly selected, any errors in vocational guidance can be corrected in good time, and the trainees can be taken to a satisfactory level of vocational skill at all stages. Training in schools and centres also lends itself to sustained educational supervision of the pupil's progress. Lastly, when the administrative organisation is good, when appropriate co-ordination has been secured with the vocational guidance, training and placing services and the general economic system of the country, a system of training schools and centres constitutes a long-term means of regulating and correcting the geographical and occupational distribution of labour in each district or in the country as a whole. To achieve this, of course, the network of schools and centres must be homogeneous and complete ; it must produce the skills required in the appropriate

<sup>1</sup> Including various mixed systems where training given in the undertaking is supplemented by classes at schools or centres



trades ; and it must be adapted to the geographical distribution of those who require training.

Nevertheless, training in schools and centres will only be efficient to the extent to which it fulfils a number of fundamental conditions, of which the following are outstanding :

1. The teaching personnel must be qualified for the job (i.e., they must have the necessary technical knowledge and have been trained *ad hoc*), they must be sufficiently well paid to be able to devote themselves exclusively to their educational work ; and they must be able to keep abreast of technical developments in the trade in question.

2. Training programmes must have due regard to genuine educational considerations, even though they are conceived with a view to the immediate practical application of the knowledge acquired. Theoretical instruction must be closely co-ordinated with and subordinated to practical instruction ; and in the training of juveniles these two forms of teaching should be preceded by some general instruction which they will then continue and supplement.

3. Where the training is for industry proper, special attention must be given, in preparing curricula and determining methods of work, to the subsequent adaptation of pupils to actual production conditions. Delegates might perhaps consider the extent to which procedures calculated to facilitate this process can be used (practice at work of the same nature as the job for which the training is designed ; the carrying out of real productive work ; creation of an atmosphere as similar as possible to that of a production workshop ; periods spent in production during the course or after its conclusion).

4. If vocational training in schools and centres is really to reach its economic and social objective, it will be necessary to deal with the following problems in the best interest of the trainees and of the country as a whole :

- (i) Difficulty of access to school training, in the geographical and in the economic sense. (This is due, on the one hand, to geographical distribution of schools and centres, the sparsity of the population, the character—or shortage—of communications and means of transport ; and, on the other hand, to general economic conditions and the resources of candidates and their families. It would be well to consider whether, and to what extent, the countries

concerned can take action on the following lines : making training available free of charge ; awarding study grants ; granting travel or subsistence allowances to pupils and trainees ; providing free or inexpensive canteen services and lodging arrangements ; or making a small payment for productive work done during training.)

(ii) The need for the strictest possible qualitative selection of pupils for centres and schools, for sustained supervision of the progress made, and for the establishment and observance of appropriate and sufficiently high standards in the judgment of final results.

(iii) The tendency on the part of school-trained persons—and particularly young men—to hold manual labour in contempt and to seek “white collar” jobs (this tendency has been noted in most countries of the region).

(iv) Deficiencies—also found in the region—in the training facilities made available to women and girls. (This no doubt belongs in the first place to the wider question of the general organisation and expansion of vocational training, but it may be advisable in the present connection to consider the possibility of preparing and applying training programmes for women and girls within existing institutions. Such programmes might relate not only to commerce, handicrafts and agriculture, but also to some modern industrial occupations—particularly in the metal trades.)

5. It is necessary, when organising adult training, that programmes, time-tables and methods should be determined having due regard to the special circumstances behind training of this kind : adult trainees will have acquired certain habits of work and some experience ; many of them will not be free during the whole day, and will have family responsibilities. Illiteracy is another obstacle to adult training. Delegates might give their views on the value of establishing special courses in this connection, and on the need for appropriate methods of instruction, since the vocational training of adults is a means of accelerating the technical and economic development of the region by spreading knowledge of new production methods.<sup>1</sup>

<sup>1</sup> Reference may also be made to the experience with courses of accelerated vocational training for war purposes which were established in several countries of the region and which made it possible to some extent to break the familiar vicious circle of low production and insufficient skill

*Technical Requirements.*

*Guidance and selection of trainees.* Reference has already been made to the role of general knowledge as a preparation for vocational training, and to the importance of careful qualitative selection of trainees for schools and centres. In the interest both of each pupil and of the community as a whole, this selection and the advice tending to guide candidates towards a given trade should be based as far as possible on a general exploration of the aptitudes of those concerned. It will be well, also, for the candidates to be informed regarding the various trades which may be chosen, so that they may reach an opinion on the advantages and disadvantages of each. The best means of satisfying these various requirements must therefore be examined.

Two problems would appear to arise in connection with *educational qualifications*, as follows :

(a) how to check the knowledge acquired before admission to a technical school or training centre. (Oral or written examination ? Tests ? Consultation of the school reports of juveniles leaving school ?) ;

(b) how to supplement this knowledge when it is inadequate. (Special additional classes ? Adaptation of vocational training programme ?).

With regard to *physical qualifications*, the most important point to be discussed is the value of a medical examination of candidates. Can such examinations be introduced generally, given the supply of medical personnel in the Asian countries ?

The Conference might also consider, with regard to *other selection techniques* :

(1) whether, and to what extent, other means of guidance and selection, such as psycho-technical tests, should be employed ;

(2) how far candidates should be given access to information regarding the different trades for which training is offered, and the type of training which they require, so that they may appreciate the situation for themselves. (Should posters or films be used for this purpose ? Should there be lectures, introductory lessons at elementary school, visits to factories, personal interviews with the school teacher or a specialised guidance officer ?) ;

(3) how far it is desirable to extend pre-vocational training, either at elementary school or—as is already done in some

places—at the technical school itself ; this might take the form of an initial school period during which the pupil moves from one workshop to another with the object of choosing his future trade.

As regards vocational guidance, reference should also be made to the Recommendation on this subject adopted by the International Labour Conference in June 1949.<sup>1</sup> Delegates might consider to what extent the principles laid down in that Recommendation are already recognised in the region, and the practical measures by which they might be put into force, particularly as regards the provision of sufficient suitable facilities for the vocational guidance of juveniles in rural areas.

Lastly, it may be asked whether a regional conference of experts on vocational guidance and selection should and could be held, and if so, where and by what organisation such a conference might be convened.

*Preparation of training programmes: (a) Co-ordination with requirements of local industry.* In each country or area, some standardisation of programmes by trade or occupation seems desirable in order to give an equal value to certificates bearing an identical title but issued by different types of training establishment. Such standardisation of course implies some uniformity in duration and level of training ; but it must be limited by the particular requirements of different occupations or employments, and particularly those of local industry. It might be useful to consider, in this connection :

(1) the value and the possibility of adjusting training programmes to the geographical conditions (soil, climate, surface, water system, etc.) under which the local industries operate, in so far as diversity in these conditions involves diversity in methods of work ;

(2) the need for adjustment of programmes at the local level to the degree of technical development reached by the undertakings which will employ the trainees (these may be handicraft establishments, old-fashioned industrial undertakings, or undertakings using modern equipment and applying new production processes) ;

(3) the necessity to bear in mind, when applying programmes, that the needs of local industries change from time to time.

<sup>1</sup> International Labour Conference, 32nd Session, Geneva, 1949 · *Provisional Record*, No 31.

Some flexibility in the application of training programmes (regarding, for instance, the relative importance of the various subjects taught, the number of hours allowed to each, the introduction of voluntary subjects, and the levels to be reached) appears in no way incompatible with general uniformity of standards.<sup>1</sup> The experts might indicate the points most appropriate for flexible treatment in each country of the region. They might also give their views on the possibility of establishing training programmes in consultation with representatives of the Government department responsible for manpower questions, and representatives of industry and handicrafts. It may be felt also that such representatives should participate in supervising the application of training programmes, and be enabled to suggest any changes which they thought appropriate from time to time. With this object, there might be grounds for establishing advisory committees, or for including representatives of industry and handicrafts on educational commissions or school boards, in accordance with the principles contained in the Recommendation of 1939.<sup>2</sup>

*Preparation of training programmes : (b) Content : practical and theoretical instruction.* With the reservations already mentioned, certain general standards for the contents of training programmes may be laid down. Reference has already been made to one of the main requirements which they must meet—the need for close co-ordination of practical and theoretical instruction and for the predominance of the former over the latter.<sup>3</sup>

In so far as the training of skilled workers is concerned, it may be added that, apart from such subjects as drawing, elementary arithmetic and the principles of geometry and

<sup>1</sup> Cf., for instance, the training syllabuses for ex-servicemen published by the Indian Department of Labour (GOVERNMENT OF INDIA, Department of Labour, Directorate-General of Resettlement and Employment *Technical Training Scheme for ex-Servicemen. Syllabuses of Training*, Oct. 1946). Under this scheme, each centre is expected to prepare, in consultation with the regional inspector, a set of exercises in the trades with which it is concerned. Moreover, the last stage of training must be devoted to giving the trainee some experience of the conditions under which he will work in the future; and the task of determining a programme of work for this stage is left entirely to the centre, with the express proviso that the programme—also drawn up in consultation with the regional inspector—must have due regard to local conditions.

<sup>2</sup> Vocational Training Recommendation, 1939 (No 57), particularly Paragraph 14 (2) (b) (See I.L.O. *Official Bulletin*, 21 Aug 1939, Vol XXIV, No 3, p 47)

<sup>3</sup> This predominance will vary with the level of instruction reached.

mechanics<sup>1</sup>, most of the theoretical knowledge and ideas required for engagement in a trade can be acquired during practical training. This is true, in any case, of ideas on the use and maintenance of machines, tools and other equipment, on measurement instruments, or on industrial safety and health ; and the same may be said of at least some of the technological information (types, properties and strengths of materials, for instance) which trainees must assimilate in order to be able to ply their future trade with success.

The contents of programmes and the part to be given to theoretical instruction depend of course on the level of general education reached by the trainees. In particular, the existence of illiteracy demands either the adoption of highly simplified programmes—and a low level of training—or supplementary general education, or, again, the use of special (exclusively oral and visual) methods of instruction. The experts might state whether, in their opinion, the first of these expedients should be preferred for the rapid training of relatively backward adults, and the other two for the training of juveniles.

Lastly, stress should be laid on the great importance of certain subjects, which, although classified as theoretical, are the backbone of high-quality training in many trades and occupations, namely, drawing and mechanics. So far as possible, trainee mechanics should learn to carry out themselves the drafting of simple machines or parts—for example, cams and gearings.

Attention should be drawn, in the circles concerned, to the fact that the future adaptability of workers will depend on the judicious choice of training programmes, particularly those for juveniles.

*Preparation of training programmes : (c) Job analysis.* The educational and practical advantages of rationally grading a course of instruction are evident. Great progress has been made in this field by analysing the operations characteristic of the various jobs which make up a given trade. The use of programmes based on such analyses is advisable from every point of view. Time is saved all along the line, so that training itself may be more rapid ; remarkable qualitative results have been achieved, and many economic advantages obtained. It

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<sup>1</sup> As well as notions of sociology and economics and such questions as technology, which cannot be completely taught during, or in connection with, practical work.

would certainly be useful for the Asian region to have the benefit of the experience gained in various countries in connection with accelerated training programmes established during and after the war. The I.L.O. might facilitate application of these new methods by making a selection of programmes and analyses of this sort available, through its Asian Field Office, to all concerned.

*Preparation of training programmes · (d) Language problems.* The problems of the local language and of technical vocabulary arise in connection with training programmes, as they do with regard to instructional manuals and other educational equipment. Perhaps a meeting of experts from the countries concerned, assisted, if thought desirable, by experts from other parts of the world, might do valuable work in this field.

*Methods of training* It is not sufficient to establish a good training programme; the choice of the educational methods used will be the decisive factor in its success. Experience acquired over a long period, at all levels and with all types of instruction, has made it possible to bring out certain methodological principles, the validity of which for juvenile training is now universally recognised. The class must be active; each pupil must be made to feel that he is individually understood, being given attention and helped—in short, that although the instruction is collective it concerns him personally. In one sense, these principles are easier to apply to vocational instruction than to any other sort, because here practical work predominates over the rest of the curriculum; but for the same reason, their neglect is still more dangerous in vocational schools than elsewhere.

The demands of adult training are less categorical in this regard, provided of course that the adults in question have been duly selected and are sufficiently educated to bring the necessary interest to the training given to them.

Whether the trainees are juveniles or adults, however, the taking of certain educational precautions will enable efficiency to be greatly increased. The following are examples.

(1) *Practical work* should move forward by appropriate stages, and care should be taken that a given operation is repeated sufficiently often to make it habitual, but not often enough to render it wearisome, and errors in the work process,

which render the exercise valueless, should not be allowed to recur. Appropriate procedures—rhythmical exercises, for instance—should be used to ensure that the trainee learns the tempo proper to each job. Habits of neatness and exactitude, corresponding to those effectively required for production, should be inculcated in the trainee. The atmosphere of the production workshop should be reproduced as closely as possible, so that the trainee may grow accustomed to his future surroundings. Consumption of materials and maintenance of equipment should be supervised. Furthermore, it may be advisable to take special precautions in initiating some groups of persons (rural workers, for instance) into industrial techniques which are entirely strange to them.

(2) *Theoretical instruction* should be closely linked up with practical work, should prepare the trainee for it, supplement it, and be adapted to the pace of the practical programme. Abstractions should be avoided, and pupils enabled to acquire definite, accurate information.

It may be well to consider the extent to which these principles can be applied in the schools and centres of the region, and, in particular, whether there is a sufficiently large number of instructors trained to this effect. The advisability of using special instruction aids, particularly vocational training films, at the different levels of education and maturity might also be considered under this heading.

*Conditions of training.* The efficiency of the training will depend also on a number of other material factors more or less closely related to the economic, social and psychological position of the trainees.

As already said, the criteria determining the *duration of training* vary as between juvenile and adult training. As a general rule, the training of juveniles at schools, etc., in the western countries for instance, extends over several years, whereas the training of adults at centres usually lasts for from six months to a year.<sup>1</sup> The duration will of course also vary with the character of the training—i.e., as between training for agriculture, handicrafts or industry—and with the requirements of the trade in question, the level of skill and knowledge to be acquired, and the standard of general education already

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<sup>1</sup> Shorter and longer periods are also found



reached at the start of the course. It is evident, too, that duration of training will depend to some extent on the degree to which instruction is systematic, on the efficiency of the educational methods used, and on the manner in which they are applied. Lastly, the habits and temperament of the population of the country will have to be taken into account.

Reform of the vocational training systems now used in the region, the introduction of new schemes of foreign origin, and a consequent change in the duration of training, would no doubt require thorough study over a complex field. Here again it may be advisable to have recourse to the experience acquired in recent years in various parts of the world, particularly the United States and the Commonwealth countries.

The *level of training* depends both on the type of needs to be satisfied and on the abilities of the pupils or trainees. Where the degree of general development of the population enables normal selection criteria to be applied, the level of training may be determined having regard to the structure of industry and the stage of specialisation it has achieved. Particular training problems relating to handicrafts and to maintenance and repair work should not be neglected here.

With regard to *training incentives*, this term covers various arrangements intended to maintain the interest of the pupils or trainees and to help them in their efforts to acquire vocational skill. The best incentive, for juveniles and adults alike, is the prospect of a safe and well-paid job after the course.

As regards juveniles, account should be taken of the long over-all length of education, with all its economic and psychological repercussions, as well as the lack of interest often shown by the young in knowledge which cannot be acquired without sustained effort. Frequent supervision of the progress made, the grant of minor cash or other rewards for such progress, and engagement on productive work for which real wages can be paid—these methods may help to stimulate the attention and the efforts of the younger trainees.

As regards adults trained at centres, the choice of an appropriate method of remuneration will certainly serve to maintain interest. For those attending upgrading courses, the prospect of promotion, with transfer to a higher wage group, is usually the best incentive. It will be for the experts to consider whether, and to what extent, some or any of these methods can be applied and would be effective in the region.

Attention has already been drawn to the importance of *welfare facilities* for trainees (canteens, boarding arrangements, sanitation, etc.). In relatively backward countries, such measures are of educational and social significance and have publicity value also. They are particularly important, above all in the case of juveniles, as a factor affecting general hygiene among the population. It would therefore appear advisable for the delegates to give their views on the value of an effort in this direction also.

*Progress tests and certificates.* Consistent supervision of progress during training has a double value. It may serve as a stimulus, and it provides a safeguard for the quality and success of the training given.

Supervision is particularly easy to organise in a school or centre, and can take various forms. It may consist of periodical tests, followed by a final examination and the issue of a certificate; or of continuous marking of the results (quality and time) of each job done. It might be interesting to determine which of these two systems is the better suited to a given population, having regard also to the technical conditions under which the training is given. Furthermore, the delegates might be asked to state whether, in their opinion, certificates should be standardised throughout the province or country, and what are the best means of ensuring that a real value is attached to them by the persons concerned. No doubt it is only in so far as the possession of a final certificate guarantees genuine qualifications in its holder that such certificates will acquire prestige in the eyes of prospective employers; and in the same way, only provided a certificate throws open to its holder the prospect of employment will the pupil or trainee make the necessary effort to obtain one.

*Placement and follow-up.* The degree of success of training given in schools and centres is finally reflected in the practical results obtained, and above all in the provision of employment for those who have taken full advantage of the training offered, have passed the final test, and seek jobs corresponding to their vocational qualifications.

This objective can hardly be achieved without full co-operation between training schools, employment services and employers' and workers' organisations; and the most suitable means of securing such co-operation, in the country in question, should therefore be explored. The employment

service, for instance, might keep the school informed of the long-term demand for skilled workers in the various occupations ; it might also develop guidance and selection services in co-operation with the undertakings concerned, and thus be able to bring about the placing of pupils at the end of their training.

The school might be informed, further, of the standards and methods applied by the employment service in making out individual cards for persons seeking employment ; and it might itself prepare such cards for trainees about to complete the course and transmit these to the employment service.

Again, the school might advise trainees, a short time before the end of their training, on the possibilities of finding jobs and on the functions and structure of the employment service (where this is suitably organised and sufficiently comprehensive). It might go further, and prepare the leaving class of pupils for the current demand of industry by selecting appropriate trades for their instruction ; in this regard, direct relations with employers might be maintained.

Similarly, direct co-operation with employers and with workers' organisations for placement purposes might be developed. This should, first of all, enable the schools to be informed of the needs felt and the technical requirements made by industry (particularly the type of equipment used) ; they could then adapt themselves to any new production technique, and bear in mind the new job openings likely to be available. Secondly, the certificates issued would have more practical value if, through this co-operation, persons holding them were assured of employment. A third aim would be some co-ordination between the possibilities of advanced training offered at the school and the promotion arrangements in force in undertakings.

The above considerations are applicable also to the placing of adults trained at centres, though here it must be remembered that there is as a rule a still more urgent need for employment than in the case of younger persons. Indeed, the organisation of courses for adults should as a rule presuppose an immediate supply of jobs for those who qualify for and complete the training provided ; and recruitment for such training should as far as possible be merely a first stage in the process of recruiting for employment. This is as a rule true of plant centres set up to

train the personnel required by one or more specific industrial undertakings.

The problems of placing to which reference has been made are particularly acute when the schools and centres operate independently, having no organic link with employing establishments ; and also when their activity is not co-ordinated with that of the employment service and other Government departments. The public authorities, and indeed all institutions concerned with vocational training in the countries of the region, should therefore aim at developing such co-ordination, as well as co-operation with employing establishments and workers' organisations.

*Training of supervisors.* A study of the problems of organising vocational training in schools and centres would not be complete unless some attention were given to the question of training supervisors. Training facilities for industrial supervisors and senior personnel of all grades (foremen, senior technicians, personnel of industry research departments, designers of models, etc. ; and executives) must fulfil certain requirements. As stated in the latter part of this report, excellent methods of training supervisors in the undertaking have been worked out in recent years in the United States and some other countries. This fact is no reflection on the efficiency of the supervisory training establishments of the school type existing in these countries, nor does it automatically render out of date the training methods used in such establishments. It would be truer to say that the training of supervisors in the undertaking makes up for the inevitable shortage of institutions of the school type, and provides the personnel in question with means of obtaining, by practice, such knowledge (particularly of a psychological and sociological character) as schools can only give them in a theoretical form. But the school—or courses organised within a school system—remains the most favourable place in which to receive the additional theoretical knowledge (technological and other) required by supervisory personnel of the various grades.

It is particularly useful to provide upgrading courses for persons already in employment, as is already done in various countries. It would appear indeed that the value of schools for supervisors is recognised in the region, since there already are such schools in several countries, particularly China, Japan, Indonesia and Indo-China. Nevertheless, the delegates might be requested to compare the respective advantages of the two

systems of training supervisory personnel—at schools and in the undertaking<sup>1</sup>—and to say which appears to them more appropriate in various circumstances.

As regards the training of senior technical personnel, most of the countries in the region already have a number of vocational training institutions of the required level, whether or not of a university character ; indeed, the number is large in comparison with that of schools for the training of skilled manual workers. Nevertheless, modern production conditions require a large increase in personnel of these grades, and it will therefore be advisable to consider the best means of meeting this increased demand. Two questions deserve special examination in this regard :

(1) In order to stimulate the promotion of the most promising technical employees in industry, access to university study must be open freely to all technicians likely to benefit thereby. It might therefore be advisable to revise the system still in force in a number of countries (not only in the Asian region, but also in other parts, including Europe), which consists in barring university study to those who have not completed a general secondary education course ; this might serve to secure fuller use of the intellectual and economic resources of each country ; it would also be conducive to social justice.

(2) A second means of meeting the need for senior technical personnel is that of organising study periods in foreign countries. However, this point is examined as part of another question on the agenda of the Conference<sup>2</sup>, and should therefore not be brought up in the present connection.

### B. *Training in Industry*

#### *General Characteristics of this Type of Training.*

Both from the economic and from the educational point of view, training in industry can boast of a number of advantages, different from those obtained by training in schools or centres, and sufficient in many cases to justify preference. It is because of such advantages that the traditional system of apprenticeship, far from disappearing, has maintained and even strengthened its position in recent years as a means of training for trades in all branches of industry ; and these same

<sup>1</sup> Cf below, p 107, regarding methods of training supervisors in the undertaking

<sup>2</sup> Cf. Report I : *Labour Inspection*.

advantages have also led to a systematic development of other sorts of in-plant vocational training, on full or part time, such as the initial training of skilled workers; supplementary training with a view to change of trade or to improvement or promotion for workers already skilled or semi-skilled; training of supervisory staff, etc.

Among the advantages of this type of training, the following deserve separate mention: it is done in the true atmosphere of production and under real industrial conditions; it is sure to be given in terms of the production technique presently in use; it will be directed towards a well-defined type of work, or even a specific job<sup>1</sup>; and no time need be lost on adaptation, technical or psychological, at the end of the training period.

In the United States and other countries, these various advantages have induced a large number of establishments to improve and rationalise their in-plant training methods, so as to make them appropriate to adults of all ages, particularly starters, unskilled workers wishing to qualify as skilled in a given operation, and persons wishing to increase their qualifications.

However, if in-plant training is to be really profitable to the apprentice or trainee for whom it is intended, provision must be made for certain safeguards, not only of a technical and educational character, but also in the form of real economic and social protection.

The basic conditions which apprenticeship training should fulfil were laid down in Recommendations Nos. 57 and 60 of 1939. The most important of these conditions should be recalled here:

2 (1) Measures should be taken to make apprenticeship as effective as possible in trades in which this system of training seems necessary. These trades should be designated in each country, having regard to the degree of skill and the length of the period of practical training required.

(2) Subject to there being sufficient co-ordination to guarantee uniformity in the degree of skill required and in the methods and conditions of apprenticeship within each trade throughout the country, the measures referred to in the preceding subparagraph may be taken by laws or regulations, or by decisions of public bodies entrusted with the control of apprenticeship, or in virtue of collective agreements, or by a combination of the above methods.

3. (1) The measures referred to in the preceding Paragraph should make provision in respect of:

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<sup>1</sup> The disadvantages of over-specialisation may be removed, if the training arrangements are well conceived, by transferring the apprentice or trainee from one type of workshop to another within the establishment.

- (a) the technical and other qualifications required of employers in order that they may take and train apprentices ;
- (b) the conditions governing the entry of young persons into apprenticeship ; and
- (c) the mutual rights and obligations of master and apprentice.

(2) In making such provision consideration should be given more particularly to the following principles :

- (a) an employer taking apprentices should either himself be qualified to give adequate training or be in a position to provide such training by some other person in his service with the necessary qualifications, and the undertaking in which the training is to be given should be such as will permit of the apprentice securing a proper training in the trade to be learnt ;
- (b) young persons should not be allowed to enter into apprenticeship until they have reached a fixed age, which should not be below the age at which school attendance ceases to be compulsory ;
- (c) where the minimum standard of general education required for entry into apprenticeship is higher than that normally attained at the end of the period of compulsory school attendance, this minimum standard should be fixed with due regard to the variations in requirements of different trades ;
- (d) entry into apprenticeship should in every case be subject to a medical examination, and where the trade in view calls for special physical qualities or mental aptitudes these should be specified and tested by special tests ;
- (e) provision should be made for the registration of apprentices with appropriate bodies and, where necessary, for the control of their number ;
- (f) arrangements should be made to facilitate the transfer of an apprentice from one employer to another in cases where transfer appears necessary or desirable in order to avoid interruption of the apprenticeship or to complete the training of the apprentice or for some other reason ;
- (g) the duration of apprenticeship, including that of the probationary period, should be determined in advance, any prior training undergone by the apprentice in a technical or vocational school being duly taken into account ;
- (h) provision should be made for the holding of examinations of apprentices on the expiry of the period of apprenticeship and, where necessary, in the course of apprenticeship, for determining the methods of organising such examinations, and for the issue of certificates based on the results thereof. The qualifications required in such examinations for any given trade should be uniformly fixed, and the certificates issued as a result of such examinations should be recognised throughout the country ;
- (i) supervision should be established over apprenticeship, particularly with a view to ensuring that the rules governing apprenticeship are observed, that the training given is satisfactory and that there is reasonable uniformity in the conditions of apprenticeship ;
- (j) any requirements of form to be complied with by the contract of apprenticeship and the terms to be contained or implied

in it should be specified, as for instance by the drawing up of a standard contract, and the procedure for the registration of contracts with the bodies referred to under (c) above should be determined.

4. (1) Provision should be made in the contract of apprenticeship as to how any remuneration in cash or otherwise due to the apprentice should be determined and as to the scale of increase in remuneration during the course of the apprenticeship<sup>1</sup>

Provided it really satisfies such conditions as the above, apprenticeship is and will remain the most popular form of vocational training for juveniles and young men and women, for it gives the learner both immediate pay and a chance to acquire skill by which he can subsequently improve his position. The same may be said of the other systems of in-plant training, to the extent to which they apply real training programmes and appropriate safeguards of all kinds are provided for the trainees.

The experience of training in industry obtained recently in various foreign countries will certainly help towards the development of similar systems in the region, and a study of the principles and methods used in the said countries might be the first step in such development. The following pages contain a brief review of these principles and methods. A more thorough study, according to kinds of training, groups of industries and types of industrial operation, would require documentary information sufficiently detailed to permit comparison between the systems applied in a large number of undertakings in different countries. The I.L.O.'s Field Office in Asia and International Reference Centre are appropriate organs for facilitating and guiding this type of study.

A second stage would consist in applying the principles and methods which seem at present most suitable for the organisation in the Asian region of efficient in-plant training schemes. Means of facilitating the application of such schemes, and the precautions to be taken to give them a maximum of efficiency, are reviewed below.

### *Organisation of the Training.*

*Programmes and methods.* In the case of training given in the undertaking, the establishment of programmes and the

<sup>1</sup> Apprenticeship Recommendation, 1939 (No. 60), Paragraphs 2, 3 and 4 (1) (See I.L.O. *Official Bulletin*, 21 Aug. 1939, Vol. XXIV, No. 3, pp. 66 and 67)



selection of the methods to be used are closely linked together. Moreover, the type of programme and of method which will be practicable depends on the choice made between two possible sorts of material arrangements, *i.e.*, training given in workshops separate from those used for production, and training given on the job.

The former arrangement is being adopted more and more where a high standard of skill is to be acquired and training must therefore be meticulous—for instance, in the case of precision instrument makers. It is to be found, not only in the accelerated training of adults, but also in apprenticeship training proper. Special expenditure is of course involved (use of premises, material and personnel for training purposes only) but this is balanced by the quality of the results achieved: training in special workshops has the same educational advantages as training in schools and centres (proper graduation of programmes, methodical choice of practical exercises, etc.), while enabling direct contact with production itself to be maintained.

Some other types of training are appropriate to a mixed system, including a preliminary shaping process in a special workshop with subsequent apprenticeship on the job. This combination is growing in favour with managements because of its evident educational advantages. It is applied mainly in certain branches of the metal trades, in the textile industries and—in a rather special form—in the coal mines.<sup>1</sup> The material and personnel devoted to instructional purposes only are much less considerable under this system than when training is given entirely in special workshops; the facilities in respect of method are nevertheless extremely valuable.

Training for certain other purposes, however, will gain nothing by the establishment of special workshops. This is true on the whole of training which can be given in stages (welding, for instance) or of jobs which can only be learned by “one-man training”, *i.e.*, by placing the apprentice under a skilled worker who acts as a sort of vocational guardian throughout the whole learning period.

Evidently, the choice between these various methods of organising vocational training in industry should be dictated first of all by consultations based on the efficiency of the

<sup>1</sup> A preliminary period is passed at a “training face” or in a “training district”.

training, and will in fact depend essentially on the type of production and kind of trade for which the training is arranged. But whatever the method chosen, every sort of training, if conceived in a modern spirit, also requires the establishment of a systematic programme under which the apprentice's theoretical and practical training may be carried forward at a rate which will enable him to acquire the necessary vocational knowledge and skill gradually and in a rational order. Where training is given entirely or mainly on the job, special precautions should be taken to ensure that the actual productive work allotted to apprentices really is of an educational character. Such precautions require close collaboration between the production services of the establishment and those responsible for training questions. Furthermore, the requirements of training make it essential that it should be placed as far as possible in the hands of specialised instructors or at least of skilled workers or supervisors who have received the necessary groundwork of training in methods of instruction.

It is important also that progress made during training should be supervised as regularly as possible. Where the training is given in separate workshops, tests similar to those used in schools can be held. Supervision is harder to arrange when the training is given entirely on the job. However, nothing should be allowed to prevent apprentices from undergoing periodic examinations to test their knowledge and skill. In the United States the method of periodical tests is now applied under all systematic schemes of training on the job.

An important final point is that of supplementary theoretical instruction. The most convenient way of meeting this need is to arrange for special classes at vocational schools in the neighbourhood of the plant ; but this method can only be applied if there are such schools within a convenient distance. Another possible solution, of course, is the organisation of special classes by the undertaking itself ; this involves additional expenditure, but it is an excellent method because it enables the theoretical instruction to be more closely related to the practical training given in the plant itself. Here again the theoretical and technical qualifications and educational ability of the instructing staff are evidently factors of the highest importance.

The contents of each programme will depend both on the trade to be taught and the methods of production current in the plant ; but it is important that some uniformity should be

secured between the programmes applied by different undertakings in the same branch of industry, and even—in different branches—between the programmes used for similar trades. This is a problem of co-ordination to which further reference will be made below.

Lastly, there should be special programmes for different levels of skills and for training with a view to special functions. This applies particularly to upgrading and promotion courses on the one hand, and to training of supervisory personnel on the other.

Upgrading courses may be given either in schools, providing day or evening theoretical classes, or in the plant itself (special classes and practical exercises), or at special meetings for these students held at permanent or *ad hoc* centres, or by correspondence. This last method is appropriate where the sparsity of the population and the structure of the industry do not enable any other method to be used, provided always that the trainees have a sufficiently high level of general education to be able to benefit by it. Such courses close with an examination and the awarding of a certificate, and are followed by promotion.

The training of supervisors in the plant was developed greatly during the war and post-war years. The "training within industry" method, prepared and applied in 1941 at the suggestion of the United States Government, has been adopted in a very large number of undertakings in various countries (particularly the United States, the United Kingdom and Scandinavian countries). Other methods worked out by private organisations, above all the C.E.G.O.S. (General Committee on Scientific Management) in France, the C.O.F.C.E. (Committee for Guidance and Training of Industrial Supervisors) in Belgium, and by Professor Carrard and the Psychotechnical Institutes in Switzerland, have also proved extremely fruitful. An attempt will be made in the following paragraphs to bring out the principles which are common to these various methods. The I.L.O. Field Office would certainly be able to provide management and other bodies concerned with systematic detailed descriptions of each such method, if desired, so that an informed choice might be made between them.

Any programme for supervisory training will be based on an analysis of the functions of the personnel in question and of the qualities required for their proper performance. Such an analysis brings out three principal objectives to which the

training must be directed: technical qualifications; general knowledge and power of expression; and preparation for functions of leadership and organisational responsibility.

Within the undertaking, the best means of promoting training with these various objectives in view would appear to be that of discussion meetings—including demonstration and explanation of practical cases—attended by a limited number of persons; subsequently, the methods taught at the meeting are practised on the job, under the supervision of a special instructor. Furthermore, lectures and special training courses lasting a few days may be arranged in order to increase the general knowledge of supervisors trained in the plant, to draw their attention to certain general aspects of their work and to the social and human problems which may arise in connection with it.

The best and most rapid way of establishing modern systems of in-plant training, both for supervisors of all grades and for other employees, is certainly to rely on consultant experts, specialising in a given group of trades and in certain types and levels of training. The cost thereby involved would appear to be more than balanced by the resulting benefit for the undertaking as regards general organisation of production, allocation of employees to suitable jobs, and even subsequent training of personnel. Furthermore, the I.L.O. Field Office would be able to provide all concerned with the necessary advice and—if occasion arose—with the services of experts on the subject.

*Conditions of training.* In the case of apprenticeship proper, the conditions under which in-plant training is to be given must inevitably be fixed in advance. They may be determined by individual contracts in accordance with legislative or customary standards, or in collective agreements between the employer and the workers of an undertaking, a craft, an industry or an industrial group. Thirdly, these conditions can be determined in full detail, for given occupations or branches of industry, by national legislation or local regulations; in this case, it is particularly important that supervisory authorities be appointed at the local level to see that the provisions in question are well and truly applied.

Whichever method of determination is preferred, the conditions of training themselves usually cover remuneration, duration of the course, weekly and daily hours of work, times

of theoretical classes<sup>1</sup>, vacations and the various other formal obligations arising, for the employer and the apprentice, out of the contractual relationship between them. The employer's moral responsibility is considerable, and most legislative schemes governing apprenticeship contain specific provisions in this regard; more particularly, he is required to see that the apprentice is set a good example, to treat him well, to protect him from ill-treatment on the part of the personnel, etc. The physical and educational responsibility is clearly very great also. The employer bears the double obligation of watching over the health and welfare of the apprentice and of ensuring that he is trained in conformity with technical standards for all the jobs essential to his trade. The employer has a large share in the responsibility of selecting training programmes, and bears the whole responsibility for their rational and efficient application.

As a rule, national regulations contain a legal definition of apprenticeship, lay down the conditions under which the right to have apprentices shall be granted or refused, and specify when and how the apprenticeship may be cancelled. There should also be provision for the supervising and testing of apprentices, the holding of examinations at the close of the apprenticeship period (as well as higher grade vocational examinations) and the grant—and if possible the standardisation—of certificates and diplomas. Persons desiring to study these matters should refer to the excellent legislation issued in recent years in most of the western countries and in the South Pacific.

In the case of training in industry without an apprenticeship contract, conditions cannot, from the very nature of the process, be regulated as fully and precisely as in the case of apprenticeship. Indeed, such training consists in most instances either of initiation into semi-skilled jobs or of preparation for skilled work for which not very high qualifications are required; it demands as a rule neither as long a duration as apprenticeship, nor attendance at theoretical classes, and it leads rapidly to the employment of the trainees on a regular footing.

Alternatively, where the total time required is as great as in the case of apprenticeship, it is usually spread over a much longer period. Nevertheless, it would be advisable to determine

<sup>1</sup> Including a statement of the employer's obligation to enable the apprentice to attend such classes without a reduction in wages or any liability to do additional work at other times.

by regulation the conditions under which such trainees could qualify for the vocational certificates, etc., usually granted at the close of apprenticeship. Accelerated training arrangements for adults and young persons also fall under this head. As has been stated, such training requires specially prepared, rational principles and methods, and does not appear to expose trainees to the same abuses as apprenticeship for juveniles ; it leads, rapidly as a rule, to employment ; and the protection of these trainees belongs rather to the field of ordinary labour legislation than to the specific domain of apprenticeship regulation.

Special problems may arise in the Asian region with regard to the remuneration of apprentices and trainees, and to the welfare arrangements which should be made on their behalf. The following aspects of this question deserve consideration.

The problem of remuneration should be settled as part of a general wage policy, securing to personnel at each of the various grades of vocational skill a rate of pay proportionate to their qualifications and seniority and affording them extensive openings for promotion. Secondly, the remuneration of apprentices and trainees should be related to that of adult workers, and should follow a progressive scale. Thirdly, any action taken in the field of welfare should be linked up with that of a more general scope intended to benefit the whole population of the region and to promote the growth and spread of satisfactory conditions with regard to housing, sanitation, nutrition, health, etc.

Lastly, training for upgrading, refresher training, and the training of supervisory personnel also raise special problems, particularly as regards continuation of previous rates of pay during the course, and in some cases the organisation of training periods in establishments other than those to which the trainee belongs. But these are technical questions which appear appropriate for examination rather at the national level within the framework of the respective industries and occupations.

*Responsibility of industrial establishments with regard to training.* Lastly, delegates might consider to what extent the responsibility for application of the principles formulated above should lie with industrial establishments themselves. There is no doubt that management has an extremely important part to play in this regard, for it can in time and of its own volition develop a progressive training policy, whereas the best legisla-

tion in the world is in danger of remaining a dead letter unless management fully grasps the economic and social importance of the task to be achieved. Furthermore, it is in the interest of industrial establishments that efficient training systems should grow up, since the economic development and prosperity of the country—and consequently of the various undertakings therein—depend in the long run on the quality and success of vocational training.

In choosing the training systems which seem most appropriate to the moment and to the conditions under which they operate, undertakings are carrying out another important function, one moreover which can only be fruitfully performed in close collaboration with the heads of school establishments and with employment services ; for decisions taken today with regard to vocational training will shape the employment situation of tomorrow and the days beyond it. Choice of trades and choice of training methods are most significant from this point of view.

Lastly, as stated, undertakings may play an important part with regard to training of supervisory personnel—a decisive factor in improving the organisation of production within each plant and therefore in increasing the efficiency of the labour force employed. Management should, therefore, be fully conscious of the scope and significance of this question.

But the efforts made by undertakings would lose much of their value and effect, if instead of supplementing those of schools and centres they were to take on a competitive character. It will be advisable, therefore, to consider what action should be taken to ensure that industrial establishments, when recruiting their apprentices and trainees and when establishing their programmes, take into account the parallel effort made by training schools and centres. It might well be necessary for representatives of undertakings to sit on school boards, and for frequent contacts to be established at all levels between the heads and teaching personnel of schools, on the one hand, and industrial and handicrafts circles, on the other.

*National and local training boards.* As just pointed out, by recognising and accepting its responsibility, industrial management can contribute greatly to the general improvement of training standards. But individual efforts of this sort can only really benefit the economic community as a whole to the extent

to which they meet the collective requirements of each trade and of each branch of local and national industry. Previous agreement should therefore be reached between the parties concerned, at the local and national level, regarding the main conditions relating to training and—in general terms—regarding programmes as well. There might also be discussion regarding the desirability of introducing a high degree of uniformity with respect to closing examinations (apprenticeship and other) and the award of certificates.

The advisability of establishing national and local training boards, including representatives of employers and workers in the occupation concerned, also deserves examination; such boards might include—as members or advisers—representatives of the official vocational guidance and vocational education services. Where such training boards fulfil certain conditions—with regard to their representative character, reputation, experience and record—the authorities might give them official supervisory functions and delegate to them certain executive tasks in connection with legislation on vocational training. Finally, like other bodies, these boards—or persons delegated by them—might be called upon to advise the authorities on the general vocational training policy of the country and the co-ordination of the various official and non-official activities in this field.

The preceding pages contain a review of the essential conditions which, it would appear, in-plant training should fulfil if it is to be integrated into the general plan of industrial economic and social development of each country in the region, and of the region as a whole. Although the training given in certain undertakings no doubt already fulfils all or some of the technical requirements mentioned, it is clear that satisfactory over-all results can hardly be achieved until the total effort has reached an appropriate level and until the necessary action has been taken to co-ordinate it at the local and at the national level.

### *C. Other Co-ordinated Action*

Last of all, it will be well to consider how close co-ordination and effective co-operation can be obtained, in each country of the region, between the various institutions which assume responsibility for vocational training, and those which operate in closely related fields: the vocational guidance and selection



services, the employment service, employers', workers' and other occupational organisations, the general educational system and particularly the elementary schools, etc.

As a rule it will be for the authorities to arrange this co-ordination at the various administrative levels and to undertake some centralising action, to the extent permitted by the constitution of the country and having regard to its geographical, ethnological, linguistic and economic structure. It is desirable that the authorities which have a hand in this work should ask the opinion of local, regional and national advisory committees, composed so as to represent the interests and reflect the opinions of the groups concerned. Among these committees, consideration should be given to the mixed training and apprenticeship boards mentioned above, as well as to the school committees of vocational and technical training institutions.

### Points for Discussion

#### I. MATERIAL NEEDS AND POSSIBLE WAYS OF MEETING THEM

##### A. *Steps to be Taken at the National or Regional Level*

1. Desirability of Governments granting priority, in the implementation of economic development plans—

- (a) to the construction or reconstruction of technical training schools ;
- (b) to the equipment of such schools with machinery, tools and other technical or training equipment

2. Desirability of the drawing up, by each of the countries concerned, of an emergency programme covering the building and equipment of vocational schools, bearing in mind—

- (a) the needs of the different regions ;
- (b) the needs of industry and the handicrafts ;
- (c) the practical possibilities to be realised from national and local resources or those which might be realised with the aid of international assistance.

3. Desirability of calling upon industry for assistance, in particular for—

- (a) the financing of the necessary building operations and equipment ;
- (b) the utilisation of industrial premises as vocational schools or as workshops for practical work experience.

4. Desirability of establishing a series of model building plans for the building of technical training schools—

- (a) adapted to local climatic conditions and resources (materials, manpower) ;
- (b) meeting reasonable standards of safety and hygiene ;
- (c) providing the most rational utilisation of available credits

5. Desirability of establishing series of model lists of equipment of technical and training materials.

6. Desirability of taking steps to facilitate the manufacture or purchase of such equipment by means of—

- (a) a joint consideration of the needs of the various countries concerned ;
- (b) development of the machine-tool manufacturing industries ;
- (c) development of the manufacture of machine-tools and other equipment by the technical training schools themselves ;
- (d) development of the importation of equipment, for example by eliminating or reducing customs duties or by granting priority to orders from abroad.

7. Desirability of considering conditions under which teaching material (handbooks, training syllabuses, films) was adapted and utilised in other countries, with special reference to—

- (a) choice of the language of instruction ;
- (b) drawing up of a technical vocabulary, where such vocabulary does not exist in the language of instruction ;
- (c) selection of handbooks, programmes or films likely to suit the training requirements of the countries concerned and the steps to be taken to adapt them to regional or local conditions ;
- (d) possibility of circulating technical training films in the countries concerned.

*B. Measures to be Taken by the I.L.O. at the International Level  
in Collaboration with E.C.A.F.E.*

8. Collection of international documentation of a practical nature to be placed at the disposal of the countries concerned, through the agency of the Asian Field Office, such documentation to include, *inter alia*—

- (a) the standards applied in the construction of school buildings and model plans drawn up and utilised to this end ;
- (b) model lists of technical and training equipment and material ;
- (c) training manuals ;
- (d) vocational training films.

9. The granting of expert assistance, on request of the

countries concerned, to assist in solving the problems connected with the building and equipment of vocational schools.

10. Study of an international assistance programme to provide technical and training equipment.

## II. TECHNICAL ORGANISATION OF VOCATIONAL TRAINING

### A. Measures to be Taken at the National Level

#### *Vocational Guidance and Selection.*

11. (a) Importance of vocational guidance and selection of candidates for training. Study of the facilities now available and the methods of developing them.

(b) Methods for ascertaining the physical and vocational aptitudes of the candidates. Desirability and practical possibilities of organising—

- (i) an examination of the candidate's educational and vocational record ;
- (ii) a medical examination ;
- (iii) a psychotechnical examination (test method).

(c) The first year of technical training to be regarded as a period of vocational guidance for adolescents.

#### *Establishment of Training Programmes.*

12. (a) Methods of drawing up training programmes. The need to base them on a systematic analysis of the work processes employed in every trade or occupation.

(b) Determination of the content of the programmes and their adaptation to the requirements and the technical level of local industry. Determination of the relative importance to be accorded to theoretical training, practical training and additional general education.

(c) Choice of the language in which the programmes are to be given (national or local). Technical vocabulary to be supplemented where it is still insufficient.

#### *Methods of Training.*

13. (a) Working out of teaching methods. Establishment of elementary principles of education. Systematisation of methods and supervision of their application.

(b) Utilisation of teaching methods suitable to the level of instruction and maturity of the trainees. Importance of educational and vocational training films.

#### *Conditions of Training.*

14. (a) Determination of the duration and level of training for adolescents and adults, according to the trade taught. Desirability, in this connection, of a survey of current

practice, and consideration of measures to be taken to improve them.

(b) Need to institute or develop training incentives, such as honorary or remunerative awards, or premiums for attendance or excellence. The need to provide adults with remuneration commensurate with their status.

(c) Methods to be adopted to make training schools or centres more accessible to the pupils, such as—

- (i) provision of training free of charge ;
- (ii) organisation of a living-in system or of low-cost board and lodging to be provided for the trainees (canteens, dormitories) ;
- (iii) award of scholarships ;
- (iv) grants of money or equipment (tools, work clothes, travel and subsistence allowances) ;
- (v) payment of a small remuneration for productive work carried out in the course of training.

(d) Measures to be taken to provide supervision of the technical instruction and teaching methods in technical schools and centres. Methods to be employed to check on the progress of the trainees (periodical examinations, notation of work completed).

(e) Methods of organising end-of-apprenticeship examinations. Desirability of awarding proficiency certificates. Form of such certificates and their value for subsequent placement.

(f) Steps to be taken for the placement of trainees on the completion of their training. Importance of close co-operation between the technical schools, the employment service and employers' and workers' organisations.

### *Training in Industry.*

15. (a) Steps to be taken to establish and develop the organisation of vocational training systems in factories for the various categories of staff employed.

(b) Desirability of organising, both locally and nationally, committees composed of representatives of employers' and workers' organisations and of representatives of the administrations concerned, to promote training on the job.

(c) Desirability of including provisions, in agreements between employers' and workers' organisations, relating to the organisation of vocational training on the job.

16. (a) Methods to be recommended for the development of apprenticeship programmes and the advancement of such programmes. Measures to be taken to ensure that the necessary theoretical instruction is provided.

(b) Desirability of establishing model apprenticeship contracts for the most important trades, in conformity with standards established by law. Desirability of adapting these contracts to the various trades concerned and to the nature of the work (handicrafts or industry).

(c) Measures to be taken to develop apprenticeship opportunities in undertakings and to stimulate the interest of employers and workers in this method of training.

17. (a) Desirability of organising other training systems in industry for initial training and upgrading of workers.

(b) Importance of on-the-job training. Measures to be taken to ensure that it is effective (specialised instructors or skilled foremen, programmes to be drawn up).

18. Desirability of, and practical facilities for, the organisation of the training of supervisory staff in industry :

(a) training methods to be considered for the purpose such as—

(i) training of specialised instructors ;

(ii) part-time employment of instructors trained in a special institution ;

(b) training methods to be advocated. Possibly the choice of a method already in use internationally, such as the Training Within Industry system ;

(c) measures to be taken to organise and co-ordinate the training of supervisory staff at the national level. Co-ordination of public and private activities. Co-operation between the public authorities and employers' and workers' organisations

#### *B Measures to be Taken at the International Level*

19. (a) International documentation of a practical nature relating to the technical organisation of vocational training systems to be collected and placed at the disposal of the countries in the region by the I.L.O.'s Field Office in Asia.

(b) Importance of this documentation being widely disseminated, and steps to be taken to this end.

20. Determination of the assistance which could be given by the Field Office, for the technical organisation—

(a) of technical training schools and centres ;

(b) of training systems instituted by undertakings.

21. Desirability of establishing training courses in the countries so desiring, to train instructors for the training of supervisors. These courses would be similar to those organised by the I.L.O. in Europe for the Training Within Industry system. Measures to be taken to achieve this end.

### REPORT III. RECRUITMENT AND TRAINING OF INSTRUCTORS

The importance of recruitment and training of instructors for different systems of vocational training cannot be over-emphasised.

First, the rhythm of the development of training is conditioned by the number of instructors available. No matter what facilities are provided by the technical schools or training centres, or the quantity and quality of equipment installed in them, the number of persons which can be trained within a given period is closely related to the number of instructors available.

Secondly, the efficacy of training provided depends to a large extent upon the technical and pedagogic qualifications of the instructor, and it is generally recognised that failures in a training programme are more often due to a low level of ability among the instructors than to other reasons. The International Labour Conference has repeatedly drawn attention to this problem<sup>1</sup>, which seems to be, at this time, particularly pressing for the countries of the region. There is, on the one hand, an increasing demand for a large number of qualified instructors required for the training of skilled personnel necessary for the execution of various development plans. On the other hand, there is still a shortage of facilities for the training of instructors to meet these needs. In recent years steps have been taken for the development of training of instructors, notably in Ceylon, China and India, and, especially during the war, in Japan.<sup>2</sup> The problem is to examine, in the light of experience gained in these countries and in other regions of the world, the principles of a rational policy of training teaching staff, and the practical measures which could be adopted for carrying them out.

#### A. *Instructors for Different Types of Training*

Before analysing the particular aspects of the problem of recruitment and training of instructors, it is useful to review the requirements which they have to meet. These are varied, and their character affects the solution which might be adopted by the countries concerned. As a general rule, distinction may

<sup>1</sup> Part VIII of the Vocational Training Recommendation, 1939, for instance, is entirely devoted to the methods of selection and training of adequate teaching staff. The Apprenticeship Recommendation, 1939, provides that "an employer taking apprentices should either himself be qualified to give adequate training or be in a position to provide such training by some other person in his service with the necessary qualifications". Attention was again drawn to the urgency of the problem in the Employment (Transition from War to Peace) Recommendation, 1944 (see I.L.O. *Official Bulletin*, 1 June 1944, Vol. XXVI, No. 1, p. 61)

<sup>2</sup> Cf. *Training Problems in the Far East*, op. cit., pp. 84, 87, 91, 92, 95.

be made between the requirements of schools and training centres, and of undertakings.

*Instructors in Vocational Schools and Training Centres.*

Schools and training centres cover a very wide field and require specialised instructors for the different branches of activity in which training is provided—agriculture, industry, commerce, domestic economy.

In Asian countries, which are predominantly agricultural and where industrial development is being accelerated, these two branches of economy are undoubtedly the most important from the point of view of training instructors, and the greatest effort should at present be concentrated on them. Each one, however, owing to its particular characteristics, presents special problems concerning the recruitment and selection of future instructors, as well as organisation of the training itself.

Moreover, the system of training in the schools and training centres could be organised in various ways which may be classified as follows: (a) full-time, (b) part-time, and (c) evening classes, and possibly correspondence courses. In each case, conditions of employment of instructors, the possibilities of recruitment, and the training they should receive may vary somewhat.

Thirdly, vocational training may be given to young persons or to adults. So far little attention has been paid to this distinction and its effects on the training of instructors. It has been frequently considered that the problem was largely the same in both cases and called for identical solutions. Experience has, however, shown that the instructors in charge of the training of adults require additional technical and personal qualifications, as they have to deal not with young persons at the beginning of their occupational life, but with men who have already worked and participated in social life. The training of adults, furthermore, is frequently organised in a more flexible manner than that of young persons. Sometimes it is of a temporary character, and that exercises an influence on the conditions of recruitment and training of instructors for adults.

Finally, as regards the technique of teaching, instructors are generally classified into two groups, one providing theoretical instruction, and the other practical training. As the two types of instruction can be separated only in theory, the necessary co-ordination constitutes an important part of

any training programme. At present, however, there is a trend in favour of having a single instructor, competent to provide both theoretical and practical instruction. In any case, in order to obtain really effective teaching, it should not be broken up into courses given by a large number of teachers.

The variety of needs which vocational instructors are required to meet must be borne in mind while organising a system of recruitment and training for the teaching staff. The particular character of these needs, in fact, determines to a certain extent the development of standards in this respect and the measures which could be adopted for their application.

#### *Instructors in Industry.*

The need for training instructors is felt not only in the case of schools and training centres, but also for different types of training in the industry, such as apprenticeship, retraining and technical improvement. In the past, this question has been somewhat neglected, and the instructors for the training of new workers in industry were often selected from amongst experienced supervisory staff, without an adequate consideration of the necessary personal qualities and aptitude for teaching. At present, however, a number of countries have fully recognised the need for appropriate training of instructors in industry, and have developed, in some cases on a large scale, systematic training programmes in this respect.

In-plant training is usually provided by (a) foremen and supervisory workers, and (b) special instructors. In practice, each supervisor is responsible for the training of workers under him. He must provide such training under different conditions than those prevailing in technical schools. His task is complicated by the fact that his training functions are in addition to his normal duties as chief of a sector of production. It is therefore considered necessary in a number of countries to give supervisors basic instruction in teaching methods, so that in-plant training may be provided under rational conditions. The same problem has to be faced in the case of special instructors, whether full-time or part-time, employed by the undertaking for training purposes. They are frequently utilised for the training of apprentices or in-plant training preliminary to employment.

In Asian countries, much remains to be done to provide adequate training in modern methods of instruction to super-



visory workers, who have traditionally given some sort of instruction to the new employees. Although supervisory workers have been vaguely responsible for providing such instruction in these countries, the new workers usually manage to learn their skill in a haphazard fashion, often from a fellow-worker, who is not always well trained himself nor—because of the loss of time and, in case of piece work, of money involved—willing to give the necessary instruction. This emphasises all the more the need for special instructors for the training of all new workers in the industry.

The problem of securing instructors for training in industry is considerably simplified by the fact that they are, for the most part, already employed in the undertaking. They require, however, specialised training in order to be able to give both theoretical instruction and practical training to workers under them. Attention must be drawn to the fact that, owing to their preoccupation with production work for a number of years, they may need, in many cases, instruction in the improvement of theoretical knowledge related to their trade. This is particularly true of Asian countries, where skilled craftsmen are often without adequate general education. Because of this deficiency, it has been recommended in India, for instance, that apprentices should be given basic information in special training centres during the first half of the apprenticeship period.

### *B. Recruitment and Selection*

As the efficiency of training provided is directly conditioned by the quality of instructors, it is most important that they should be recruited with great care. It appears that from this point of view three questions, namely, the sources of recruitment, selection, and conditions of employment, may be particularly examined.

#### *Sources of Recruitment.*

Vocational instructors could be secured, in principle, from four different sources: (a) persons with a secondary school or university education; (b) persons qualified as instructors in another field of education; (c) workers trained in technical schools; (d) workers who have acquired adequate training experience in industry. The choice among different sources depends partly on the specific needs which instructors are

required to meet and partly on the practical possibilities of recruitment and training of the teaching staff.

As to agriculture, it is generally difficult to recruit candidates likely to become good instructors from among farmers themselves. Very often, therefore, it is necessary to choose such instructors, according to the nature of the training to be provided, from graduates of secondary schools and universities, students of agricultural training schools and qualified instructors in other fields of education, for example, teachers who could specialise in agricultural training or give such instruction in rural schools in addition to their normal functions.

On the other hand, as regards technical schools for industry, although there are cases where the responsibility for providing training is entrusted to persons selected from the first two groups, such instructors are more frequently selected from among the best students in technical schools on the completion of their training, or from among supervisors or craftsmen with sufficient ability and occupational experience. This last solution appears to be usually accepted in the case of the training of adults, who are already familiar with the occupational milieu, and it has been adopted by most countries which have organised a training system for adults separate from that for young persons.

In undertakings which themselves organise training of their workers, instructors are generally selected from among supervisors or skilled craftsmen belonging to the personnel on the basis of the necessary aptitude and experience.

The sources of recruitment vary, furthermore, according to the nature of instruction to be provided. Groups (*a*) and (*b*), for instance, are apt to supply teaching staff for theoretical and general information courses, while instructors in charge of practical training would be selected from among groups (*c*) and (*d*).

Although the choice of instructors, from the point of view of their origin, could be inspired by technical considerations, it depends essentially upon the practical possibilities of recruitment offered by different sources. To what extent can industry or handicrafts provide candidates of the required standard of occupational skill? Is it possible to find in training institutions such as universities or technical schools a sufficient number of candidates with the required aptitude wishing to follow the career of an instructor? In fact, having dealt with a variety

of needs for and the lack of instructors in Asian countries, is it not the best way to have recourse to all possible sources of recruitment, and to seek, irrespective of their origin, candidates with suitable aptitude and wishing to make teaching their career ?

It should be emphasised, however, that the origin of instructors may affect the organisation of the training which they require. According to the circumstances, it would be necessary to give them either technical knowledge or instruction in teaching methods, or both, and the duration as well as the contents of the training have to be adapted to each particular situation. Furthermore, instructors recruited from technical schools ought, before being accepted, to undergo a short period of training in an undertaking with a view to acquiring experience in an occupational milieu. It is important to take into account, at the time of recruitment, therefore, the possibilities of training required for the teaching staff.

#### *Selection of Instructors.*

Whatever the origin of instructors, the success of their training is primarily based on an appropriate selection of candidates. This aspect of the problem has often been neglected in the past. The regulations on this subject relate in most cases to standards of age, occupational experience and level of education. In recent years, efforts made in a number of countries for the organisation and development of vocational training have led to a thorough study of standards of selection of instructors and have made it possible to determine their conditions of application. Although these standards vary from country to country, either owing to the difficulties of recruitment or to different requirements of training programmes, it is possible to classify summarily the general criteria adopted as follows.

1. *Technical competence.* It is necessary for the candidate to have a thorough theoretical and practical knowledge of his trade. To assure this, it is generally required that he has passed an apprenticeship or vocational school examination or its equivalent. In a number of countries (*e.g.*, France and the United States) he is required, furthermore, to pass written and practical examinations.

2. *Practical experience.* This is generally emphasised in the choice of candidates. In a number of countries five to

seven years of practical experience, often partly of a supervisory character, is required. In Japan, apprentice trainers are required to have three to ten years of practical experience according to the level of technical training received by them.<sup>1</sup>

3. *Educational background.* As an instructor must be able to develop training schedules, organise his knowledge for effective instruction, and express himself clearly and logically, he has to have a certain educational background. In the United States, for instance, the equivalent of a high school education is required.

4. *Qualities of leadership.* Qualities such as a pleasant personality, patience, and an ability to understand and handle people are necessary in an instructor to create the proper atmosphere for training, and to engender enthusiasm among the trainees. It is partly for this reason that supervisory workers are most suitable as instructors.

5. *Aptitude for teaching.* It is most essential that a candidate has a proper aptitude for imparting his knowledge and skill to others. In France, for instance, a psychotechnical examination is designed to ascertain his psychological qualifications and inclination for teaching. With the same end in view, in Sweden candidates are required to give a demonstration of their teaching ability.

These general requirements are meant to serve only as a guide for the selection of instructors. In order to secure good results they ought to be applied and interpreted by qualified and thoroughly experienced experts. For instance, the fact that a candidate is a good electrician is not enough. He must also have a thorough knowledge of the construction work or of electrical installation which he will have to teach. Similarly, the number of years of practical experience is not always a sufficient indication of the real ability of the instructor, as the value of experience varies according to the intelligence of the person concerned. In certain countries the personality of the candidate is carefully analysed and psychotechnical tests are used for the purpose. The background and diplomas are examined. Such information is classified and analysed with a view to determining a reliable basis for the decision.

The establishment of a satisfactory system for the selection of instructors could only be achieved gradually. As such a

<sup>1</sup> *Training Problems in the Far East*, *op cit.*, p 64.

system is an essential factor in the success of training, it appears that the Governments of the region should take interest in the question with a view to determining standards of selection adapted to the conditions of each country as well as to training efficient experts for the application of such standards.

#### *Conditions of Employment of Instructors.*

In order to secure a good corps of instructors for technical schools, it is necessary, furthermore, to assure candidates attractive conditions of employment and promotion in their new career. In a number of countries of the region these conditions are usually not attractive enough to induce skilled workers to take up teaching as an occupation. School instructors are often paid less than skilled workers who, furthermore, are badly needed for production work, and industry is generally reluctant to part with their services. It is not always fully appreciated that highly qualified workers released from employment for instruction purposes must in the long run contribute more to increasing production than if they were retained in actual production.

#### *C. Training of Instructors*

The organisation of the training of instructors raises a number of different problems. The first problem is to determine the contents of training and the second to elaborate the training programme.

In general, the quality of an instructor depends on two factors : knowledge of the occupation and ability to teach. If his occupational knowledge is insufficient, his teaching will not be satisfactory. If, on the other hand, he lacks the necessary teaching ability, it will be impossible, or at least very difficult, for him to impart his knowledge to his pupils.

As a result, the contents of training can be determined only in relation to the qualifications which the candidates already have. If they have neither occupational knowledge nor teaching ability, the training ought to include both of these. This is sometimes the case when instructors are recruited from among graduates of secondary schools and universities. If they have the teaching ability, as, for instance, school teachers, they will require technical training. Finally, if they have occupational experience, it will be necessary for them to learn teaching methods ; this is the position in the case of instructors recruited for industry or handicrafts.

The duration of training is conditioned practically by its contents. In the first case mentioned, the training period is necessarily long, and may last several years. In the second and third cases, however, it may be very much shorter, depending upon the trade or the level of training to be attained.

Similar factors influence the practical possibilities of organising training. If it is to be long and thorough, it generally requires the establishment of special centres. If, on the other hand, it is concerned only with certain elements, other means may be considered, such as part-time training, evening courses, or short courses provided by itinerant instructors either in trade schools or in undertakings, or holiday courses, for the teaching staff of technical schools.

Finally, the problems concerning creation of a homogeneous group of trainee-instructors, equipment, and material organisation of training require different solutions according to the training system adopted.

An analysis of various solutions, their possibilities and disadvantages, ought undoubtedly to be based on the economic and social conditions prevailing in the region, which may indicate the choice of one or more among them. In any case, several factors are of great importance for such an analysis. First, the training provided ought to be easily accessible to candidates for employment as instructors. Otherwise, the recruitment of candidates would be limited to a certain zone or a certain class of persons. This difficulty might be overcome, when technically possible, by a dispersal of means of training through itinerant courses of short duration. Secondly, the system must be capable of satisfying various needs for training in different trades and for different types of training. Finally, the most effective system, provided it gives satisfactory training, is naturally the one that is least expensive.

The systems of training which justify a special study, in that they can already be organised and developed within the region, appear to be as follows : special centres of a permanent or temporary character, training in industry ; and training abroad.

#### *Special Institutes.*

The establishment of special institutes for training instructors makes it possible to organise a body of knowledge, tradition and experience in the field of training. They provide better

facilities and equipment for training and research. They are necessary, furthermore, for building a corps of instructors with a high level of efficiency, who would help to maintain a high standard of training throughout the country.

The establishment of such an institute involves a number of problems. In Asian countries, where such institutes are a recent development<sup>1</sup> and only limited experience in their operation is available, these problems are particularly acute. They relate to (1) material equipment; (2) teaching staff; (3) planning of training programmes and methods of training instructors; (4) development of efficient methods of training craftsmen; (5) facilities for practical teaching; (6) conditions of training; and (7) placement and follow-up.

*Material equipment.* The establishment of adequate premises and the securing of proper equipment such as machines, tools and various types of training aids (manuals, charts, films, etc.) are more than a financial problem. Expert knowledge of the requirements of efficient teaching is necessary to determine satisfactorily the need for such material equipment. Furthermore, certain equipment might have to be secured from abroad.

*Teaching staff.* The most essential factor in the operation of such training institutes is the teaching staff with expert knowledge of the trade concerned and of the most effective methods of training instructors. In most Asian countries, persons with such qualifications are scarce. Special arrangements will, therefore, have to be made for their training, which may be provided within the country by inviting experts from abroad. Furthermore, suitable persons may be sent abroad for the necessary training.

*Planning of training programmes and methods of training instructors.* Efficient planning of training programmes and of training methods can obviously be effected only through securing highly qualified teaching staff. It is most useful to draw upon the experience of industrially advanced countries in this respect.

*Development of efficient methods of training craftsmen.* As in the above case, highly qualified teaching staff is the best assurance for the development of efficient methods of

<sup>1</sup> The Ministry of Labour of the Government of India established, in co-operation with provincial Governments, a central institute for training instructors in Bilaspur, Central India, early in 1949. It has facilities for training annually 400 instructors, divided into two groups of 200 each, in 20 different types of trades both in industry and handicrafts.

training craftsmen. Training methods used in other countries, however, might be studied and adapted to the particular requirements of the country concerned.

*Facilities for practical teaching.* Theoretical instruction in methods of training needs to be combined with practice in the application of these methods. For this reason, it has been found most useful to affiliate a vocational school with a training institute. Such a school should be of a standard high enough to serve as a model.

*Conditions of training.* In most countries of the world (*e.g.*, Brazil, China, France, India, Peru, the United Kingdom and the United States) training for instructors is provided free of charge, and in many countries trainees receive remuneration during their training. In several countries (*e.g.*, France, India and the United Kingdom) they are paid the cost of the journey between the training institute and their place of work ; facilities for food, lodging and recreation are also provided in a number of cases.

These factors require special attention in Asian countries, as the trainees have often to travel long distances from their home or place of work to the training centre, and it is difficult to secure adequate board and lodging for a reasonable price. These difficulties are fully appreciated by the Governments in Asian countries which have provided facilities for training instructors. In India, for instance, the trainees selected for the Central Training Institute continue to draw their regular pay and allowances and are paid the cost of the journey between the Institute and their place of work. The Institute also provides hostel accommodation and food, as well as facilities for recreation and entertainment, for the trainees. In China, board, lodging and a uniform are provided free of charge during the period of training. In addition, the trainees receive an allowance which, in accordance with the decision of the Bureau of Technical Training, must be equivalent to the State scholarship allowance for students at a university.

*Placement and follow-up.* As vocational instructors are usually trained to meet a pressing need, normally their placement in suitable employment should not present any problem. It is necessary, however, to organise a system of follow-up to assist them in initial stages to carry out their work more effectively. This is particularly important in Asian countries, where industrial tradition has not yet been established and instructors have



to adjust their methods of training to the requirements of particular situations such as inadequacy of equipment and tools, background and qualifications of the trainees.

It is worth noting that in the United States one of the criteria suggested by the Federal Office of Education for determining whether a State vocational training programme for instructors is well organised is that specific provision should be made for the following-up of the work of new vocational instructors in the State by the agency or agencies responsible for their initial training. In France, the Bureau of Technical Inspection (*SERVICE DE CONTRÔLE TECHNIQUE*) engages a number of inspectors who visit various training centres for adults and report on their work as well as the work of instructors. They help modify, as necessary, the standard training programmes which the instructors are ordinarily required to follow.

With a view to keeping the instructors acquainted with the new improvements in the technique and teaching methods, it has been found necessary to organise refresher courses for them. For instance, in France, in the United Kingdom and in many States of the United States such courses are provided. It appears that they are particularly required in Asian countries, where there is a considerable possibility for improvement in techniques of production, and methods of instruction might require modifications in the light of new developments in the science of pedagogy. In India, a refresher course has been introduced to ensure that instructors remain conversant with the latest developments in the methods of production and teaching. For this purpose instructors' institutes and their equipment could be used to provide such courses during holidays.

#### *Training Within Industry.*

Large numbers of workers are trained in the industry by supervisory workers or, in larger undertakings, by special instructors. In recent years, efforts have been made to give them special training in methods of instruction. This has been facilitated by the fact that efficient techniques have been evolved for providing such training in industry.

The Training Within Industry method, evolved in the United States, for instance, is specially designed to provide, among other things, a method of job instruction with a view to enabling supervisors to train new workers under them. This has proved to be a most effective method of developing skilled personnel

rapidly and in large numbers. It is necessary that industrial establishments should be made familiar with this as well as other methods of training supervisors in the skill of instructing.

T.W.I. training for supervisors in methods of instruction is provided by trainers specially instructed in the presentation of the job instruction programme for groups of supervisors within establishments. Such groups are usually made up of eight to ten persons. A T.W.I. trainer is recruited from the staff of the undertaking desiring to introduce the programme, and is given special instruction in its presentation. Such instruction is provided by specialists in a central institute, and lasts for five to ten days. As the programme is simple and standardised and still universal in its application, it has been possible to adopt it within a large number of countries throughout the world. The International Labour Office has assisted in this development in carrying out its manpower programme in a number of European countries.

As the chief responsibility for the organisation of such training rests with the management, it is desirable that its importance should be realised fully by the employers. Public authorities might assist in its promotion by (a) adopting it in Government undertakings, and (b) conducting enquiries into such schemes already in operation, publicising their results, and trying to persuade other undertakings to adopt them. Governments concerned, furthermore, may assist by establishing a central institute for providing the necessary instruction to the trainers.

The Conference might discuss the desirability of training supervisory workers in special instruction technique in direct connection with the job and different methods of promoting such training, either on a national or a regional basis.

*Training Abroad and Expert Assistance from  
Foreign Countries.*

Several countries in the West have greater experience in the training of vocational instructors than most countries in the Far East. Facilities for training instructors are difficult and costly to organise, above all because there is a serious shortage of qualified teaching staff. Some of these difficulties might be overcome by international or regional co-operation. The Preparatory Asian Regional Conference of the I.L.O. (New Delhi, 1947), for instance, recommended that regional, national

and international exchange of students and teachers should be promoted to facilitate exchange of knowledge and experience.

It might be necessary, as a provisional measure, to send a number of properly selected instructor-trainees abroad or to secure the services of experts in the training of instructors from industrially advanced countries. A third possibility worth examining is the establishment of a regional institute for the training of instructors or the provision of temporary seminars for the improvement of instructors already employed. All three pose special problems.

*Training abroad.* In the case of most Asian countries training abroad of a certain number of instructors might be necessary. It is, of course, not a permanent solution ; its principal usefulness lies in the fact that at this stage it might be the most effective method of building up a nucleus of capable instructors for organising and operating training centres or institutes within the country. This requires (i) selection of qualified persons, (ii) selection of the country providing the best facilities for the type of training required, and (iii) arrangements for the financing of such a programme.

As regards *selection of instructor-trainees*, in order to secure full benefit from training abroad, trainees should be selected with special care. It appears necessary that they should have : (a) adequate knowledge of the trade, including considerable practical experience necessary for learning the desired techniques ; (b) some experience as instructors ; (c) qualities of leadership so that they are able to organise training for instructors on their return ; (d) adequate knowledge of the language of the country where they are to receive training ; (e) some familiarity with, preferably previous personal experience of, the habits and customs of the people of the country, so that necessary adjustments, particularly pertaining to food, can be made without too great an inconvenience.

Careful *selection of the country* to which a particular trainee might be sent is equally important. Among the principal factors to be considered in making such a selection are : (a) the type of training (apprenticeship, training in schools, training of adults in special centres, and training in the industry) of which a country has special knowledge ; (b) trades and industries (e.g., engineering trades, electricity, glass works and cottage industry) in which a country has the best facilities ; (c) where raw material used in a particular industry (e.g.,

housing) is similar ; (d) language ; and (e) social habits and customs which render it possible for the trainees to make the necessary adjustment easily. For instance, France and Switzerland have an efficiently organised system of apprenticeship ; Japan has a great deal of experience in the effective operation of cottage industry ; and the United States is the birthplace of the T.W.I. programme. The choice of the country in which instructors are to be trained should be made in the light of the type of training needed and the value of the systems which have been made available.

In regard to *financial arrangements*, training abroad, no doubt, will be provided free of charge by the countries providing such facilities, but arrangements will have to be made concerning travelling expenses, payment of wages, payment of living allowance, etc. Fellowships, to which reference has already been made, may be secured in some cases. In all events, responsibility for financial obligations involved in sending instructors abroad for special training needs to be defined.

These problems may be most fruitfully discussed by the Conference, which may suggest ways in which the I.L.O. can assist in their satisfactory solution.

*Expert assistance from abroad.* The bringing of training experts from abroad to assist in the organisation of a suitable training institute for vocational instructors in a country or in the improvement of existing institutions has several advantages. First, it would be less expensive than sending a large number of trainees abroad. Secondly, the presence of experts within a country would give them a better knowledge of its requirements and thus enable them to make a most fruitful contribution towards an effective organisation of training facilities for vocational instructors. Obviously, such experts have to be selected with great care. It appears that, among other qualities, they need : (a) thorough theoretical knowledge and practical skill required in one or more trades ; (b) extensive experience in training instructors ; (c) experience in the organisation of training centres or institutes for vocational instructors ; (d) adequate knowledge of the language understood by the people among whom they have to work ; (e) an appreciation of a different way of life than their own, so that they may be able to acquire a sympathetic understanding of the problems facing the country seeking their services and to make the necessary personal adjustments to the new environment ;

(f) qualities of leadership ; and (g) enthusiasm for their work. A person with a combination of such qualities, obviously, is not easy to secure.

It is suggested that various problems related to the selection and securing of the services of training experts from abroad, and the assistance which the I.L.O., with its close contacts in all parts of the world, can provide in this respect, might be discussed by the Conference

*Establishment of a regional training institute.* The advantages and the practicability of a regional institute might be explored.

It might be advantageous, for instance, if a number of neighbouring countries in Asia, faced with somewhat similar needs, agreed to co-operate in organising and financing a special training institute for the training of vocational instructors. This, as compared with separate arrangements in each country, might be more economical and might make it possible to give better training and to draw on the services of the best qualified teaching experts in any given trade or occupation. It is also possible to create several centres of special instructors, each in a particular branch of activity, and located in the country most appropriate to provide the necessary teaching staff.

On the other hand, the organisation of such an institution gives rise to a number of problems related to : (a) location ; (b) building and equipment ; (c) material organisation ; (d) recruitment and selection of teaching staff ; (e) standards for the selection of trainees and agreement concerning the number allotted to different countries concerned ; (f) medium of instruction ; (g) facilities for practical experience ; (h) hostel arrangements for trainees and the teaching staff ; and (i) financial arrangements.

The Conference may wish to discuss the practicability of such a regional institute or institutes and the way in which the problems specified above could be solved. It may recommend ways in which the I.L.O. could provide the necessary assistance.

#### D. *Standardisation of Certificates*

It is essential for the success of any vocational training programme that instructors should have uniformly high standards of proficiency. In order to promote such standards most Governments have found it of practical value to grant

a national certificate to all instructors on the successful completion of their training. In India, for instance, the establishment of a central institute, which grants a national certificate on the successful completion of the course, was considered more suitable, partly for the promotion of uniform standards of craftsmanship.

Standardisation of certificates involves a number of problems, such as (a) the determination of methods of establishing standards ; (b) the organisation of a body responsible for it ; and (c) the registration of certificates.

The determination of suitable methods of establishing standards in a country requires a thorough study by experts of the methods employed for the purpose in different countries and the evolving of a system suited to the requirements of the country concerned.

An advisory committee consisting of representatives of the Government, the training institute, and the employers' and workers' organisations can be of great assistance in the establishment of standards of proficiency. It is common experience that such a co-operation among various parties concerned is of great help, not only in establishing suitable standards, but also in facilitating their wide acceptance. If several institutes for the training of instructors are established in a country, their co-ordination with a central institute is usually considered necessary for the maintenance of uniform standards.

It appears that the registration of certificates might be relegated to a central authority.

The Conference might discuss these problems and suggest ways in which the I.L.O. could provide assistance.

### Points for Discussion

#### A. ACTION AT THE NATIONAL LEVEL

1. Necessity of training a sufficient number of instructors, with the appropriate technical skill and teaching ability, for training schools and centres.

2. (a) Desirability of establishing for this purpose, in each country not already so equipped, a special training institution at which instructors could receive initial training for their work and return at intervals to refresh and improve their knowledge and technique.

(b) Action with a view to the organisation and operation of such an institution.

3. Desirability of making other arrangements for the training of instructors, such as—

- (a) part-time training courses given during the day or in the evening ;
- (b) short courses given by itinerant teachers, either at technical schools or in undertakings ;
- (c) courses held at technical schools during the holidays.

4. Action with a view to facilitating the recruitment of instructor personnel for training schools and centres, and to improving their status and conditions of employment so as to avoid migration to other occupations.

5. Action with a view to organising the selection of candidates for employment as instructors.

6. Action with a view to standardising the certificates issued to instructors on the completion of their training.

7. Necessity of providing training in teaching skills for instructors employed by undertakings and for supervisory personnel ; action with this object in view.

#### B. INTERNATIONAL ASSISTANCE

8. Desirability of sending abroad for training a number of instructors, who would be capable of organising and developing instructor training on their return.

9. Desirability of having recourse to the assistance of foreign experts in the organisation of training for instructors and supervisory personnel.

10. Desirability of establishing a regional instructor training institution for the countries of the region ; action with this object in view.

11. Desirability of collecting appropriate reference material of a practical character, and of international scope, and of making this available to the countries concerned through the I.L.O. Field Office in Asia ; such material to relate to—

- (a) methods used to organise and develop the recruitment, selection and training of instructor personnel ;
- (b) programmes for the training of such personnel ;
- (c) methods of organising and operating instructor training institutions.

12. Determination of the technical assistance which might be provided by the I.L.O. Field Office, at the request of the countries concerned, with a view to—

- (a) exploring the possibilities of training instructors abroad, and facilitating recourse thereto ;
- (b) placing foreign experts at the disposal of Governments or undertakings which may so desire ;

- (c) organising one or more national institutions for the training of instructor personnel ;
- (d) organising the regional institution for training such personnel, if it is decided to establish one ;
- (e) preparing and applying methods of recruiting, selecting and training instructors, and the appropriate training programmes.

#### REPORT IV. VOCATIONAL TRAINING OF DISABLED PERSONS

The vocational training of the disabled is a specialised problem and is doubtless of narrower scope than are the other problems relating to training. However, this is a question of such importance from the social point of view that it has been decided that it should be included among the vocational training problems relating to the countries of this region.

Furthermore, the results of the enquiry carried out by the expert of the International Labour Organisation in 1948 demonstrate that the importance of this question has been perceived and that certain preliminary measures of a legislative and practical nature have already been taken to solve it. This is notably the case in respect to the countries which have been involved in war, such as China, India and Japan.<sup>1</sup>

At the time that an examination is being carried on in these countries concerning general measures to intensify and co-ordinate the vocational preparation of young persons and adults, it would seem equally appropriate to consider the question of the organisation of vocational training for disabled persons with a view to their re-employment. In accepting this point of view, the countries of the region are joining the general movement which was brought about by the experiences of the past thirty years and intensified during the war.

This experience has shown that the majority of disabled persons may be re-established in professional life and that this reintegration should be an important aim of employment policy.<sup>2</sup>

<sup>1</sup> *Training Problems in the Far East, op. cit.*, pp. 80, 83, 86, 91, 95

<sup>2</sup> The International Labour Organisation has given sustained attention to this problem. Certain principles relating to the vocational training and the re-establishment of disabled persons in the economy are set forth in the Employment (Transition from War to Peace) Recommendation, 1944 (No. 71). In 1945, the International Labour Office submitted a preliminary report on the training and employment of disabled persons. The question has now been placed on the agenda of the 33rd Session of the International Labour Conference, and a report has been prepared by the Office entitled *Vocational Training of Adults, including Disabled Persons* (Report IX (1)) (Geneva, I.L.O., 1949)



*A. Recognition by Governments of the Principle that Disabled Persons should be Given the Opportunity of Taking their Place in Employment*

The vocational training of disabled persons is, of necessity, dependent upon the employment opportunities open to these persons. It would be useless and costly to organise training systems for them if they could not eventually be placed in productive employment. For this reason the principle of re-integration of disabled persons in the economy must be recognised by Governments as being the basic aim of any vocational training policy in this field.

The re-employment of disabled war veterans has for some time been organised in a number of countries according to systems of reserved employment or on a basis of employment priorities. In China, for example, the Regulations of December 1946 (Executive Yuan) and of March 1947 (Ministry of Social Affairs) comprise such measures. However, the question today is one which relates to a principle of much broader scope. On the one hand, it is necessary to eliminate all distinction relating to the origin of the disability and to include disabled persons of all categories, whether the disability has occurred as the result of a war, or of a work accident, or from some other cause. On the other hand, there is a tendency to enlarge as much as possible the work opportunities open to disabled persons by giving them the vocational abilities necessary to enable them to be on an equal footing with able workers, rather than by giving them special legal rights. Moreover, experience has shown that the field of employment opportunities may be greatly extended, due account being taken, of course, of the nature and gravity of the disability in question.

It is clear that the application of such an employment policy can only be put into effect gradually. However, there is none the less a very great interest in facilitating the development of the means of carrying out this principle.

*B. Industrial Rehabilitation Courses*

The organisation of the training of disabled persons does not differ substantially from that of normal workers. For this reason it is thought that it is preferable, where possible, to avoid making a distinction between the two categories of

workers and to train them under the same conditions and to employ the same techniques. It is also necessary to consider in this connection to what degree it would be possible to enable disabled workers to take up the industrial training actually organised for adult workers, whether it be in industry, in the schools or in special training centres.

However, this solution may give rise to difficulties in this region, owing to the fact that it is generally recognised that the means of training able workers have not been developed sufficiently. On the other hand, certain categories of disabled workers are not able to benefit from regular training techniques. This is the case, for example, with respect to tubercular workers, in whose case questions of surroundings and climate are of predominant importance. In these circumstances it is perhaps desirable to consider the establishment, in countries which do not as yet have any, of one or more experimental centres for the training of disabled workers. These experimental centres would enable the countries to develop training techniques and to train a corps of qualified personnel, such as would be necessary in order to expand the system of training.

The previous experience in China, India and Japan can no doubt be useful in determining policy. In addition, the assistance of the I.L.O. Field Office in Asia may be called upon in solving the administrative and technical problems which arise in organising such centres as, for instance, in the training of administrative and technical personnel who are qualified and trained to deal with the special problems relating to disabled workers ; the setting up of qualifications for the selection of trainees and the determination of the training to be given to them ; the determination of the relationship between physical re-education, vocational guidance and vocational training ; and the final supervision of the disabled workers who are trained and placed in employment. The foregoing must be considered to be the basic questions relating to a training policy which may be developed gradually to meet the needs of this region.

*C. The Relation of the Nature and Extent of the Disability  
to the Type of Course and Intensity of Instruction,  
and to Employment Opportunities*

In order to organise vocational training for disabled persons and to ensure their re-employment, it is necessary to determine the occupations which these persons may exercise, due account

being taken of the nature and extent of their disability. Great progress in this respect has been made since the end of the last war. In the past, the occupations reserved for disabled workers were limited to a very small number and involved the use of only a limited number of vocational skills. However, at the present time, the number of employment possibilities open to these persons has increased greatly in a varied number of industries. A thorough analysis of the physical aptitudes required for various jobs and of the possibilities of physical and vocational readaptation on the part of the disabled has made it possible to determine that the great majority of disabled workers can be enabled to take up vocational activity again without being inferior in it to able workers.

Present trends towards this point of view reveal the basic principles for the organisation of vocational training for the disabled designed to permit them to take up normal employment. In the first place, this training should relate to varied occupations in order to enable disabled workers to choose their future occupations in relation to their preferences and to their abilities and also in relation to the prospects on the labour market. In the second place, it is preferable, wherever possible, to re-educate the worker in the trade or occupation which he previously exercised or in a related trade or occupation, in order to enable him to make use of the abilities and vocational experience which he has already been able to obtain. Finally, this vocational training must reach a standard sufficiently high to enable the disabled worker to acquire the abilities which he must have in order to perform his job under the same conditions as able workers.

In the countries of this region, vocational re-education is at this time centred for the most part in the handicrafts. In view of the importance of this field of activity and of the employment opportunities which it is able to offer, it is probable that all these training opportunities should be retained and made use of. At the same time, it is necessary to emphasise the fact that it has been shown by experience that modern industry also offers a great choice of employment opportunities for which disabled workers may be trained. One of the first steps to be taken in this relation may be the setting up of a list of trades which offer reasonable opportunities for employment and which require relatively simple training, towards which the initial re-education programme might be directed.

#### *D. Medical Supervision during Rehabilitation and Training*

Medical supervision during the training of disabled workers is of great importance in a great many cases. If the disabled worker has reached the stage of permanent partial disability it is not necessary to set up continual medical supervision, and normal methods of medical assistance may be made use of. However, when the physical condition of the disabled person has not yet become stabilised, medical supervision must be considered necessary throughout the period of vocational training.

The organisation of this medical supervision will obviously vary according to the training systems in use. When disabled workers are being re-educated in industry at the same time as normal workers, the employers themselves should take steps, in co-operation with the competent authorities, to see that full or part-time medical service is available. In cases where training is being given in special training centres, medical supervision may be provided by the medical counsellor of these institutions. Medical supervision may be supplied by a regular doctor living in the vicinity of the training centre, who accepts a contract to provide part-time care. If the training centre is of a specialised nature for certain types of disabled persons, a surgeon or specialist of another nature may be entrusted with the same functions under the same conditions. The system outlined has proved satisfactory in a number of cases.

The conditions under which medical supervision should be organised should be taken into consideration at the same time that the training system for disabled workers is established. It is important to take measures to enable the necessary medical supervision to be recruited, or to locate the training centres in regions or localities where such personnel already exist in sufficient quantity to make it possible for their services to be made use of in the training of disabled workers.

#### *E. Co-operation of Workers' and Employers' Organisations as well as of Other Bodies concerned (Medical Associations, Philanthropic Societies, etc )*

It is generally accepted that the over-all programme of vocational training should at all times be carried out in the closest possible co-operation with organisations of employers and workers. Such co-operation is of even greater importance than usual, if that may be the case, in relation to the training

of disabled persons. This is due to the fact that in the last analysis it rests with the employers and with labour organisations to assure the development of means of training and of employing and of improving the conditions of work of these workers, and no Government programme would be able to obtain these results without their co-operation. Measures have already been taken, notably in India, to assure such co-operation. In that country, the Central Consultative Employment Commission has established a subcommission authorised to deal with questions relating to disabled war veterans which includes among its members representatives of the employers' and workers' organisations. Similar commissions exist in the provinces. Thus, it seems that this principle is fully accepted and that its practical application will be extended so that organisations of employers and workers are brought increasingly to participate in the development of social and economic policy.

The assistance of other interested organisations is also a factor in the determination of the success of the measures taken on behalf of disabled workers. The medical associations and philanthropic societies, for example, also play a very important role, either in helping in the development of training techniques, or in carrying out studies on the scope and nature of questions relating to the re-education of disabled persons, or, finally, in performing a public information function in various industrial quarters in order to make known the importance of this question and the practical methods of resolving it.

Thus, it may be seen that the co-ordination of the various activities which may help to develop these different plans will greatly assist in extending systems of training for disabled workers.

#### *F. Placement and Follow-up*

Vocational training of the disabled is of no practical value, as has already been pointed out, unless it leads to the rational placement of the persons concerned. This placement cannot be satisfactory unless the disabled persons are able to work efficiently and, at the same time, under conditions of equality with the other workers not suffering from any disability. On the other hand, the occupational activity which these persons carry on must not be of a sort which would tend to aggravate the disability or endanger the safety of their fellow workers. Finally, it is necessary to overcome the obstacles which might

arise from the employers or the workers themselves. It often happens that the employment of the disabled meets with a certain amount of prejudice on the part of employers, who fear that the recruitment of the disabled will result in diminished profits as a result of the need for special arrangements and of costs arising out of the frequency and gravity of accidents, and the rate of absenteeism. Workers, on their part, fear that the disabled workers will accept conditions of remuneration and of work lower than those current in the particular occupational category concerned, and that this will affect the situation in relation to the regular workers in the occupation.

In cases where re-education is carried on in the skilled trades, certain of these problems may be solved more easily, but it follows that a special effort must be made to overcome these problems in relation to placement in industry.

It is important to emphasise the fact that placement is much more easily effected in those cases where appropriate measures have been taken from the beginning to select trades corresponding to the different types of disability ; to guide the disabled persons toward the various trades suitable to the extent and the nature of their disability ; and, finally, to supply adequate vocational training. To summarise, the question of placement, which is the final phase in the process of re-education and re-employment, depends in large part on measures taken at earlier stages.

In addition, the re-employment of the disabled should not be considered as effected after placement has been made. It is necessary to conduct a follow-up as to the results achieved by the disabled worker who has been placed once again, in order to remedy any errors which may have been made and also to note the results achieved and to gain valuable information for the future.

Thus, it is shown that the placement and supervision of disabled workers constitute important problems which have caused a number of countries to take special measures in order to organise selective placement, to co-ordinate action of the services dealing with the placement of the disabled with those charged with general aspects of placement, and, finally, to co-ordinate closely the various technical services which have functions to perform at each of the stages of vocational guidance and the retraining and re-employment of the disabled. The countries of the region which do not yet have employment

services may not as yet be in a position to achieve the same results as countries having these services. However, the previous experience of other regions of the world will doubtless be very valuable in enabling these countries to determine the nature of their activities and the practical measures which they should take in a gradual manner in order to achieve effective results.

### Points for Discussion

#### A. MEASURES TO BE TAKEN ON A NATIONAL BASIS

1. Recognition on the part of Governments of the principle that disabled persons should be assured the opportunity to engage in useful employment.

2. Desirability of establishing lists of trades requiring simple training, for which the vocational training of the disabled may be envisaged, due account being taken of employment opportunities, and of the nature and degree of the disability

3. Desirability of establishing in each country one or more experimental centres for the vocational training of the disabled. Examination of the measures which must be undertaken in this respect.

4. Desirability of training for this purpose a basic staff of specialised instructors.

5. Measures which must be taken in order to obtain the co-operation of employers' and workers' organisations and all other interested bodies, in order to assist in the organisation and development of training for the disabled.

#### B MEASURES OF ASSISTANCE TO BE ORGANISED INTERNATIONALLY

6. Collection and provision to interested countries through the I.L.O. Field Office in Asia of practical material relating to—

- (a) the administrative and technical organisation of centres for the vocational rehabilitation of the disabled ;
- (b) methods and programmes of rehabilitation ;
- (c) trades for which the various categories of disabled persons may be rehabilitated.

7. Determination of the technical assistance which might be supplied by the I.L.O. Field Office on the request of the countries concerned—

- (a) to establish the lists of trades which may be exercised by the disabled persons who have to be rehabilitated ;

- (b) to set up and organise one or more experimental centres for the training of the disabled ;
- (c) to train the instructors for these centres.

## II. Report of the Conference

The Asian Conference of Experts on Vocational and Technical Training met in Singapore from 12 to 23 September 1949.

It was attended by delegates from the following countries : Australia, Ceylon, France, Hong Kong, India, Indo-China, Federation of Malaya, Netherlands, New Zealand, Pakistan, Singapore and the United Kingdom.

Observers from E.C.A.F.E., S.C.A.P., U.N.E.S.C.O. and the United States were also present.

The Conference unanimously elected Mr. B. Ponniah (*Ceylon*) as Chairman, Mr. G. W. Davis (*Singapore*) as Vice-Chairman, and Mr. S. N. Roy (*India*) as Reporter of the Conference.

The Conference appointed a Drafting Committee consisting of delegates from Indo-China, New Zealand, Pakistan and the United Kingdom, the Chairman, the Vice-Chairman and the Reporter of the Conference being *ex officio* members of the Committee.

The Conference was opened by His Excellency the Governor of Singapore, who welcomed the delegates and emphasised the importance of the day, which was also the anniversary of the date of liberation of Singapore from its occupation by the Japanese. He noted that the agenda for the Conference dealt with matters of basic importance for the development of natural resources of the region

The Secretary-General said the I.L.O. was very grateful to the Government of Singapore for its hospitality in inviting the Organisation to hold this Conference at Singapore, and read a telegram from the Director-General thanking His Excellency the Governor for the invitation. He also thanked His Excellency on behalf of the Conference for his kindness in opening the meeting in person. He referred to the I.L.O. manpower programme, which aimed at concrete action, and mentioned the special measures taken in respect of Asian countries, in particular the establishment of the Field Office for Technical Training. He drew attention to President Truman's Fourth Point and to the technical assistance programme which was



now being worked out by the United Nations and the specialised agencies, including the I.L.O. The objective of the Conference was to determine both long-term and short-term requirements for assistance in the field of vocational and technical training in the countries of the region, for the guidance of the I.L.O. as a whole and in particular of the Asian Field Office.

Various delegates, including those from Australia, Ceylon and Pakistan, complimented the Office on the high quality of the technical reports prepared for the Conference. In a general discussion on the four reports, in which delegates from several countries took part, the following points were brought out :

1. The objectives of the Conference are to devise practical solutions for training problems in Asia and the Far East. Training schemes which have proved to be successful in the industrially advanced countries of the West will have to be adapted to the social and economic conditions of the Asian countries.

2. In the economic structure of Asian countries, as the delegates from Ceylon, Indo-China and Pakistan emphasised, small-scale and cottage industries play a very important role, and they can be developed so as to provide employment for a large number of people.

3. A number of delegates, including those from Ceylon, India, Malaya, Pakistan and the United Kingdom, stressed the point that technical and vocational training problems could be considered only in relation to employment possibilities, and that in many Asian countries there was a serious gap between training and employment.

4. Owing largely to a shortage of financial resources, the standard of training provided in many cases is not sufficiently high and does not give the trainee adequate practical experience. This fact adds to placement difficulties and widens the gap between training and employment.

The Conference has discussed the four reports in detail and has drafted a resolution which is annexed to this report.

In addition to the points mentioned in the resolution, the Conference wishes to draw attention to the following matters which it discussed :

- (1) Consideration was given to the possibility of organising sample enquiries as a means of ascertaining the requirements

for skilled manpower. The Conference feels that such enquiries are not practicable, as the facilities required do not yet exist on a sufficient scale in the countries of the region.

(2) The determination of priorities among the various requirements of the Asian countries in the field of vocational and technical training was examined, but the conclusion was reached that it was not possible at the present time to establish such priorities. Each country would have to solve the problem for itself on the basis of its own requirements and its available resources.

(3) The Conference is unanimously of the opinion that general education is of fundamental importance. Though general education can be dealt with as a whole only within the framework of a national educational policy, all possible means should be used to improve the general knowledge of young people and adults undergoing vocational and technical training.

(4) With regard to the organisation of technical schools, the Conference stresses three essential points :

(a) the establishment of pre-apprenticeship courses, which the Conference considers important, is rendered difficult by shortage of finance and the need to train workers rapidly for a large number of occupations ;

(b) vocational and technical training should not be directed too much towards the preparation of technicians and executives for large-scale industry, and the major part of the training facilities should be used for producing skilled tradesmen and handicraft workers ;

(c) in order to minimise the present drift of skilled labour from industry and handicrafts to administrative and office posts owing to the prestige attached to the latter, it is desirable that steps should be taken to change the social attitude of the people so that employment in industry and handicrafts may enjoy the same prestige as employment in administrative and office posts.

(5) The Conference recognises that shortage of materials and equipment for vocational and technical training is without doubt the most serious handicap in the development of training programmes in the countries of the region.

(6) The Conference is of the opinion that industry can help in the provision of buildings, material and equipment, but considers that no section of industry should by virtue of such

assistance be allowed to exercise any undue influence on training programmes.

(7) The importance of vocational guidance and vocational selection is unanimously recognised, but in present circumstances the means necessary for the development of such guidance and selection are not available, and only a progressive effort over a protracted period will bring about satisfactory machinery for these purposes.

(8) The Conference recognises the great importance of adequate measures for the recruitment and training of instructors, and in particular the establishment of standards for the purpose.

(9) Although instructors should have a good general education, in present circumstances it must be recognised that in the Asian countries technical competence and occupational experience are more important in the selection of instructors than a high level of general education.

(10) As for the training of disabled persons, the Conference agrees that the conditions in the countries of Asia are of a special character and that this problem cannot be dealt with in the same manner as in highly industrialised countries. The establishment of a well-developed system of training will doubtless be achieved only by gradual stages, because of a shortage of resources and a lack of employment possibilities for disabled persons.

(11) The Conference stresses the important part which can be played in respect of vocational and technical training in Asia by the International Labour Organisation in co-operation with the Economic Commission for Asia and the Far East.

(12) The countries of Asia represented at the Conference are looking to the I.L.O. for assistance in providing, in co-operation with other specialised agencies of the United Nations, information and teaching aids of a practical nature, sending suitable experts to advise Governments on their training problems, arranging facilities for the training abroad of nationals of the countries concerned and undertaking supervision of the trainees, and in appropriate cases organising courses of instruction in Asia and the Far East.

(13) The Conference notes with gratitude the statements made by the representatives of Australia, France, India, New Zealand, and the United Kingdom and the observer sent by

S.C.A.P., that requests made through the International Labour Office for assistance in specific cases would be sympathetically considered by their Governments or authorities.

(14) In conclusion, the Conference thanks the Governing Body of the International Labour Office for having convened it, and considers that its deliberations will be of great benefit to the countries of Asia and the Far East in the development of their vocational and technical training programmes.

23 September 1949.

(Signed) S. N. ROY,  
Reporter.

### III. Resolution adopted by the Conference

Whereas the International Labour Conference adopted in 1939 two Recommendations concerning vocational training and apprenticeship respectively ;

Whereas the Preparatory Asian Regional Conference of the International Labour Organisation (New Delhi, October-November 1947) likewise adopted several resolutions relating *inter alia* to vocational training and apprenticeship ;

Whereas vocational and technical training is a prerequisite to the economic and social development of the countries of Asia and to the raising of the standard of living of their population ;

Whereas in these circumstances it is desirable to lay down, within the framework of the above-mentioned Recommendations and resolutions, guiding principles for practical action in this field, and to formulate suggestions of a national or international character which will facilitate the solution of the general and technical problems with which the countries concerned are confronted ;

The Asian Conference of Experts on Vocational and Technical Training,

Having been convened at Singapore by the Governing Body of the International Labour Office, and having met from 12 to 24 September 1949,

Notes with satisfaction the steps which have been taken by the International Labour Organisation with a view to promoting the development of vocational and technical training in the countries of Asia, including in particular the establishment of the I.L.O. Field Office, emphasises the importance of close co-operation in this question between the International Labour

Organisation and the Economic Commission for Asia and the Far East, and

Adopts, this twenty-third day of September 1949, the following resolution :

### I. GENERAL ORGANISATION

1. (1) Every programme of vocational and technical training drawn up and put into practice in any country of the region, should be based on an analysis of short-term and long-term needs for various skills for economic development.

(2) In this connection the following methods are recommended to Governments :

- (a) an immediate survey of requirements for various skills and a continuing systematic study of economic and employment market trends ;
- (b) a study of recruitment through guilds where practicable ;
- (c) adjustment of training programmes to manpower needs.

2. All training programmes, including those of short duration, should provide such basic education as the educational level of the trainees and the character of the training required by means of—

- (a) general education courses to precede or supplement technical and vocational training ;
- (b) special part-time or evening courses for young persons or adults who are receiving an in-plant training.

3. (1) The network of vocational schools existing in each country should be progressively developed with due regard on the one hand to industrialisation plans and on the other hand to the particular importance of handicraft activities to the region.

(2) Such a network of schools should include, *inter alia*—

- (a) wherever possible, facilities for initiation into manual work of several kinds ;
- (b) trade schools for the training of skilled workers ;
- (c) schools for the training of supervisory staff and technicians for industry.

(3) The training programmes applied in vocational schools should include—

- (a) initial training courses to precede entry into employment ;

- (b) supplementary training courses for the upgrading of workers ;
- (c) courses of theoretical instruction specially designed for workers receiving on-the-job training.

4. (1) Apprenticeship systems should be organised for those industrial and handicraft trades which require a high degree of skill.

(2) The following measures are recommended to Governments as fundamental in this connection :

- (a) enactment of apprenticeship legislation, where appropriate, establishing rights and obligations of employers and apprentices and prescribing rules which shall apply to the organisation and supervision of this method of training ;
- (b) the institution, in each country, of national, regional and local apprenticeship committees composed of representatives of employers' and workers' organisations and representatives of the authorities responsible for economic development and technical and vocational training ;
- (c) the organisation of a public apprenticeship service having at its disposal a skilled staff capable of promoting the development of this type of training in undertakings ;
- (d) the establishment of close co-operation between the apprenticeship service and the employment service.

5. Provision should be made for other systems of in-plant training of relatively short duration, for young persons who have neither attended a vocational school nor had the benefit of a proper apprenticeship.

6. (1) Steps should be taken by the Governments to make available suitable and adequate facilities for the training of adults, including full-time, part-time and evening courses for the training and upgrading of workers to be organised and developed in schools, and, in appropriate cases, in special training centres.

(2) Undertakings should likewise institute or elaborate in a systematic manner training programmes for their adult workers. Such programmes should contain, *inter alia*, means of facilitating the upgrading and promotion of workers.

(3) Training in schools and special centres may usefully be followed by a period of supplementary training in the course of employment in an undertaking.

7. (1) The distribution of administrative responsibilities between the authorities concerned with various aspects of vocational and technical training should be clearly defined and a systematic co-ordination of these authorities should be established in order to ensure the efficacy of the training and the rational use of the available resources, the co-ordinating authority being normally the employment service.

(2) Advisory bodies should be set up for the purpose of ensuring at the national, regional and local level the full co-operation of—

- (a) the authorities concerned with education, training, employment and economic development ;
- (b) representatives of employers' and workers' organisations ;
- (c) other organisations concerned with youth questions, with vocational guidance and with technical and vocational training.

8. Programmes for training abroad should be developed and improved, in particular in the following ways :

- (a) the categories of persons granted priority for training abroad should be determined by Governments with due regard to the necessity of forming a nucleus of skilled persons capable on their return of promoting progressive development of technical and vocational training ;
- (b) such plans for training abroad should receive careful study and wherever necessary should be constantly reviewed and adapted as necessary to economic requirements ;
- (c) standards of selection of trainees who are to be sent abroad should be carefully prescribed and applied ;
- (d) trainees should be guaranteed appropriate positions on their return in order that the fullest possible use may be made of the experience which they have acquired.

## II. MATERIAL NEEDS

9. (1) Governments should grant priority in carrying out economic development plans to—

- (a) the provision of machine tools and other technical and instructional equipment to vocational schools ;
- (b) where necessary, the construction or reconstruction of such schools.

(2) In countries in which such programmes do not at pre-

sent exist, emergency programmes covering the equipment and construction of vocational schools should be drawn up, with due regard to—

- (a) the needs of the different areas ;
- (b) the needs of industry and handicrafts ;
- (c) the practical possibilities of achievement afforded by national and local resources or which may be created by international assistance.

(3) Special attention should be devoted, in this connection, to the requirements of small-scale and cottage industries.

10. (1) Industry may be asked to co-operate in—

- (a) the financing of the necessary construction of buildings and the purchase of equipment ;
- (b) the use of industrial premises as vocational and technical schools or as workshops for practical experience.

(2) In such cases steps should be taken to ensure that the organisation of vocational and technical training is not subjected to any undue influence from any section of industry.

11. To facilitate the organisation of vocational schools, each Government should prepare—

- (a) sets of standard lists of technical and educational equipment ;
- (b) sets of standard plans for the construction of schools which should be adapted to local climate and resources, should satisfy a reasonable standard of safety and hygiene and should also make the best use of the available credits.

12. The manufacture or purchase of technical equipment should be facilitated by all possible means, including, for example—

- (a) joint consideration by the countries concerned of their needs ;
- (b) development of the machine tool manufacturing industry ;
- (c) development of the manufacture of machine tools and other equipment by the vocational and technical schools themselves ;
- (d) eliminating or reducing customs duties or granting priority to orders from abroad.

13. (1) A special study should be made by the appropriate national services of the ways in which teaching materials



from other countries (handbooks, training syllabuses) may be utilised and adapted.

(2) Steps should be taken to draw up and standardise a technical vocabulary where the existing one is not yet adequate.

(3) The use of modern teaching aids, such as films and film strips, should be developed.

### III. TECHNICAL ORGANISATION

14. (1) Measures should be taken to develop the vocational guidance and selection facilities available to persons intending to enter upon vocational training courses.

(2) Such measures should include, *inter alia*—

- (a) an examination of the candidates' educational and vocational record as well as medical examinations ;
- (b) the use of psychotechnical tests where properly qualified persons are available to adapt and apply them.

(3) There should be fixed an initial period of training, varying in duration according to circumstances, which might be used in the vocational guidance of young persons.

15. (1) Training programmes should be based on the principle of progressive development of production techniques, beginning with the use of simple tools and passing on to work with more complex machinery. Such programmes should therefore be drawn up on the basis of a systematic analysis of the work processes employed in each trade or occupation.

(2) The content of the programmes and the relative importance to be accorded to theoretical training, practical training and general education should be carefully determined, with due regard to—

- (a) the purpose and the duration of the training ;
- (b) the requirements and the technical level of industry and handicrafts and their probable evolution.

(3) Programmes should be so framed as to achieve, at each level of training, the highest possible degree of occupational skill.

(4) Teaching methods should, wherever possible, be improved and systematised. To this end each country should examine the methods worked out in highly industrialised countries, with a view to adapting and using such methods.

16. Training conditions in schools and centres should be prescribed with due regard to the following points :

(1) The duration of the training should be such as to ensure that at the end of training, trainees are qualified for their tasks in industry.

(2) Measures should be taken to stimulate the interest of the trainees by such means as monetary or other awards for attendance or outstanding work.

(3) Attendance at vocational schools should be facilitated by such measures as—

(a) the provision of training free of charge, free provision of work clothing and tools and, where appropriate, the granting of travel and subsistence allowances ; or

(b) the award of scholarships ; or

(c) the organisation of a living-in system or the making available of low cost board and lodging facilities to trainees. Such hostels and other social assistance facilities as may be set up in this connection should be of a standard equivalent to that existing for the pupils in other schools ; and

(d) payment for productive work carried out in the course of training.

(4) Vocational schools and training centres should receive regular supervision in respect both of organisation and of teaching. The methods of supervision to be employed in this connection should be determined and systematised by the competent authority.

(5) In order to enable trainees to obtain employment proportionate to the skills which they have acquired, end-of-training examinations should be instituted and certificates of proficiency should be awarded. These certificates should have validity throughout the country.

(6) With a view to facilitating the placement of trainees on the completion of their training, close co-operation should be established between schools, the employment service and industry.

17. In-plant training should be promoted and developed in accordance with the following principles :

(1) Steps should be taken :

(a) to determine those trades in which it may be desirable to establish apprenticeship systems ;

- (b) to draw up model contracts of apprenticeship adapted to the various trades and in conformity with the standards laid down by law ;
- (c) to increase apprenticeship opportunities available to young workers.

(2) Where practicable, collective agreements and other arrangements between employers' and workers' organisations should include provisions relating to the organisation of in-plant training.

(3) Governments should extend to industry such technical assistance as may be necessary for the development of training, in particular by making experts available for the purpose of analysing the training needs existing in particular undertakings, helping with the framing of suitable training programmes and following up to advise and assist in getting them carried out.

#### IV. RECRUITMENT AND TRAINING OF INSTRUCTORS

18. (1) A sufficient number of instructors with the appropriate technical skill and teaching ability should be made available for technical and vocational training.

(2) To this end there should be established in each country—

- (a) special training institutions at which instructors can receive the necessary initial training for their work and to which they can return at intervals to refresh and improve their knowledge ;
- (b) other arrangements for the training of instructors, such as—
  - (i) part-time training courses given during the day or in the evening ;
  - (ii) short courses given by itinerant teachers, either at technical schools or in undertakings ;
  - (iii) courses held at technical schools during the holidays.

19. (1) Steps should be taken to ensure satisfactory status and conditions of employment of instructors in order to facilitate recruitment and to avoid instructors being attracted to other occupations.

(2) Candidates for instructor posts should be recruited on the basis of prescribed standards of selection, due regard being

had in particular to the level of technical competence, to practical experience, to general education and to teaching capacity. In existing circumstances greater importance should be attached to technical competence and to practical experience than to general education.

20. Certificates of competency as instructors should be standardised on a national basis and should be issued by a national authority.

21. With a view to facilitating the training of workers on the job, training in teaching skills should be provided for instructors employed by undertakings and for supervisory personnel.

#### V. TRAINING AND RETRAINING OF DISABLED PERSONS

22. Although it is recognised that the technical and vocational training and retraining of disabled persons will of necessity make fairly slow progress in the countries of the region because of the shortage of resources and practical facilities, it is recommended to Governments that the following principles should be taken into account in the development of technical and vocational training of disabled persons :

(1) The principle that disabled persons should have an opportunity to engage in useful and suitable employment should be recognised.

(2) The problem of the vocational training of disabled persons should be approached positively, *i.e.*, stress should be placed on the aptitudes and capacities of the persons concerned rather than on their disabilities.

(3) Where the disability of a person is no bar to his being trained alongside able-bodied persons, there should be no distinction between disabled and able-bodied persons, and training should be given to all under the same conditions and with use of the same facilities.

(4) Special attention should be paid to training in handicrafts, which are best suited to the conditions now prevailing in the Asian countries.

(5) Medical supervision of disabled persons should be ensured during their training and a system of placement and follow-up organised.

(6) The organisation of technical and vocational training of disabled persons should in each country be entrusted to a single authority working in co-operation with other interested authorities and organisations.

(7) A committee composed of representatives of the competent authorities, of employers' and workers' organisations and of other bodies concerned should be set up in each country of the region to study this subject and to examine the possibilities of putting into practice a policy for the technical and vocational training of disabled persons.

23. The following measures are recommended as the first steps to be taken in this field :

(1) The establishment of machinery comprising medical and employment service experts for assessing the capacity of the individual disabled person and advising him in the selection of an occupation which he should follow or for which he should be trained.

(2) The establishment, in countries in which such centres do not yet exist, of one or more experimental centres for the technical and vocational training of more severely disabled persons under sheltered conditions.

(3) Training of a staff of specialised instructors.

## VI. METHODS OF INTERNATIONAL COLLABORATION

24. (1) International documentation concerning vocational and technical training should be collected by the International Labour Office and made available to the countries of Asia.

(2) Such documentation should be of an essentially practical character and should in particular include—

- (a) handbooks, training manuals and programmes, lesson sheets and trade tests ;
- (b) standard lists of technical and instructional equipment, including blueprints for the manufacture of small machine tools for handicrafts ;
- (c) films and film strips prepared specially for technical and vocational training ;
- (d) information relating to vocational guidance and in particular to the use of psychotechnical aptitude tests.

(3) Such documentation should be made available in both

official languages of the International Labour Office, namely English and French, and as soon as possible in the principal languages used in the countries of Asia, and the Governing Body is invited to look into the question of authorising the Office to undertake the translation of the most important basic documents into the appropriate languages.

(4) The International Labour Office should include in its publications the greatest possible amount of practical information relating to the technical organisation of vocational training.

(5) The documentation selected and assembled by the International Labour Office should be disseminated throughout the countries of the region by all possible means, including photostat and micro-films.

25. The International Labour Office should examine the possibility of—

- (a) supplying blueprints for power-driven plant and labour-saving equipment adapted to the needs of local industries and handicrafts, due regard being had to the raw materials available in the Asian countries ;
- (b) providing illustrated catalogues of such equipment already under manufacture in different parts of the world, together with an indication of the sources from which the equipment may be procured.

26 Qualified experts should be made available through the International Labour Office to Governments desiring the services of such experts to assist in the development of technical and vocational training, whether in technical schools and training centres or in undertakings.

27. (1) The International Labour Office should, in co-operation with other international agencies such as the United Nations Economic Commission for Asia and the Far East and the United Nations Educational, Scientific and Cultural Organisation, examine the possibility of obtaining and organising training facilities abroad, and should be entrusted with the supervision of the progress of trainees in the course of such training.

(2) A special programme should be worked out in this connection by the International Labour Office with a view to training as rapidly as possible—

- (a) a nucleus of officials destined to fill key posts in the organisation of technical and vocational training in their countries ;
- (b) a certain number of instructors capable on their return of organising and developing the vocational training of instructors.

28. (1) The International Labour Office should organise or develop instructor training centres on the national or regional level for the countries of the region.

(2) The International Labour Office should organise in the countries of the region instructor training courses for the training of supervisors, giving special attention to training systems for supervisors in local and handicraft industries.

29. (1) Each Government should be invited to designate a technical correspondent who would be responsible for maintaining contact with the International Labour Office and in particular with the Asian Field Office.

(2) A regional committee of experts on technical and vocational training should meet annually in the region in order to enable them to exchange views on the progress achieved in this field, especially as the training programmes borrowed from other countries will have to be modified and adapted to local conditions.

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